

# GENERAL CATALOGUE 2021



# FERMAX

CONNECTIVITY FOR ALL

# FERMAX RESIDENTIAL COMMUNICATION

## VIDEO DOOR ENTRY SYSTEMS

We are a leading manufacturer of audio & video door entry systems and access control systems.

We offer home automation and security solutions for residences including connectivity features.



For the **entrances** we offer excellent interior-exterior communication solutions, ensuring that doors work properly using our door entry systems.

In the exterior of the building, we offer different panels aesthetics: modular, continuous profile, vandal-proof and even cutting-edge design touch screen devices.

In the **residences**, monitors and telephones are an essential security element in the home. Furthermore, the indoor terminals are an investment in the building's quality. We make the difference between monitors with indispensable features and monitors able to integrate home automation functionalities and call divert to smartphones.





## ACCESS CONTROL



Our access control systems allow to offer **different solutions according to the project's specifications** and types of doors and/or facilities.

In **garages**, we install systems that control vehicle access.

In **leisure areas** (gym, tennis court, swimming pool) we provide access control systems with restricted hours and/or capacity limits.

It is possible to add graphic maps that show the different access points, from which is you can visualize even the integrated cameras in the system and register all the events.

## CONNECTIVITY



WE TAKE THE LEAP TO NETWORKABLE PRODUCTS

Our products are equipped with numerous user-friendly possibilities for the security and comfort in the home.

They are designed to meet the **demands of a video door entry system from a smartphone or tablet**, wherever you are.

Thanks to the use of Apps it is possible to manage multiple functions from your mobile phone.

**WELCOME TO THE FUTURE!**



## OUTDOOR PANELS



Modular Aluminium Panel.

DUOX PLUS VDS 4+N



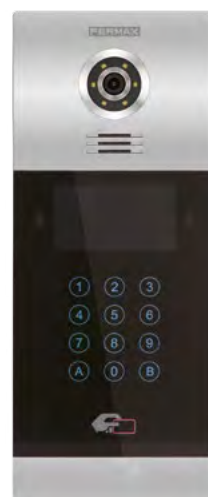
Continuous Profile.  
Aluminium Panel.

DUOX PLUS VDS 4+N



Continuous Profile.  
Aluminium Panel.

MEET



Continuous Profile.  
Aluminium Panel.

MEET

NEW



Stainless Steel Panel.  
Vandal-Proof.  
Laser Engraving.

MEET



Stainless Steel Panel.  
Vandal-Proof.  
Laser Engraving.

DUOX PLUS VDS 4+N



Stainless Steel Panel.  
Vandal-Proof.  
Laser Engraving.

DUOX PLUS VDS 4+N



Continuous Profile.  
Aluminium Panel.

4+N

## GUARD UNIT



Audio Guard Unit

DUOX PLUS



With Video Reception

MEET





## INDOOR TERMINALS



4,3" Monitor  
with handset

**VEO**



Call Divert to Mobile

**VEO**

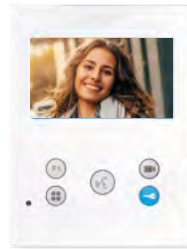
No WiFi

DUOX PLUS

**VEO**

No WiFi

VDS



4,3" Monitor Hands-free

**VEO XS**



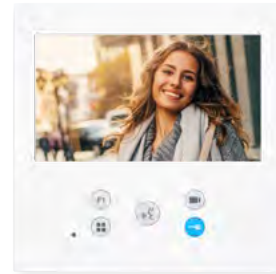
Call Divert to Mobile

**VEO XS**

No WiFi

DUOX PLUS

NEW



7" Monitor Hands-free

**VEO XL**



Call Divert to Mobile

**VEO XL**

No WiFi

DUOX PLUS



**wit**

Monitor with high performance  
features. Hands-free. Call Divert to  
Mobile. Android APPs

MEET

NEW



**neo**

Monitor with Hands-free. Video  
Reception. Call Divert to Mobile.

MEET



**smile**

Hands-free

VDS

NEW



**VEO**

DUOX PLUS

4+N



**LOFT**  
Basic

VDS



**LOFT**  
Extra

DUOX PLUS

VDS

4+N



**ILOFT**  
Hands-free

DUOX PLUS

VDS



**CITYMAX**

4+N

## AROUND THE WORLD

We are a global company that communicates homes all over the world. **We interpret the needs and desires of people** to transform them into differentiating, high performance and simple use products.



Torre Bolueta. SPAIN



Grafton Quarter. UNITED KINGDOM



Nautilus. BELGIUM



Tema Istanbul. TURKEY



The Links. DUBAI



D'Leedon. SINGAPORE





Art Deco-Woly Apartments. POLAND



Grand Hôtel Dieu. FRANCE



Clube Humbria. PORTUGAL



Gran Reserva de Pontevedra. COLOMBIA



Charlotte Towers. AUSTRALIA



Masteri Thao Dien. VIETNAM







## SOLUTIONS FOR INDIVIDUAL RESIDENCES AND BUSINESSES

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<b>Video</b> kits	10
<b>Audio</b> kits	20
<b>Audio</b> kits up to 24 apartments	24

## SOLUTIONS FOR BUILDINGS

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<b>DUOX PLUS</b>	
The only fully digital system in 2 wires	26
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The IP system based on point-to-point infrastructure	56
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## ACCESS CONTROL

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Remote connectivity and integrated fingerprint	

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# KITS

**FERMAX**





**Solutions for individual residences,  
businesses and small buildings**

Video Kits. Audio Kits. Building Kits.



# VIDEO KITS

## RESIDENCES AND BUSINESSES

SELECTION OF VIDEO KITS FOR RESIDENCES AND BUSINESSES.


All these Fermax video kits are Plug and Play (kits don't require programming).

	 DUOX PLUS VEO WIFI KIT	 DUOX PLUS VEO-XS WIFI KIT	 <small>NEW</small> DUOX PLUS VEO-XL WIFI KIT	 DUOX PLUS MARINE VEO-XS WIFI KIT	 <small>NEW</small> DUOX PLUS MARINE BLACK VEO-XS WIFI KIT	 DUOX PLUS ONE-TO-ONE VEO WIFI KIT
OUTDOOR PANEL	 <b>cityline</b>	 <b>cityline</b>	 <b>cityline</b>	 <b>Marine</b>	 <b>Marine</b>	 <b>cityline</b>
MONITOR	 <b>VEO</b> 	 <b>VEOXS</b> 	 <b>VEOXL</b> 	 <b>VEOXS</b> 	 <b>VEOXS</b> 	 <b>VEO</b> 
REFERENCES No. APARTMENTS	94411 (1/W) 94421 (2/W)	94511 (1/W) 94521 (2/W)	9471 (1/W) 9472 (2/W)	50731 (1/W)	50831 (1/W)	49081 (1/W)
CALL DIVERT TO SMARTPHONE	Yes	Yes	Yes	Yes	Yes	Yes
TECHNOLOGY	2 wires	2 wires	2 wires	2 wires	2 wires	2 wires
PANEL MOUNTING	Flush mounted	Flush mounted	Flush mounted	Flush mounted	Flush mounted	Flush mounted
INTEGRATED ACCESS CONTROL	No	No	No	No	No	No
ACCESSIBILITY	No	No	No	No	No	Yes
ADDITIONAL PANELS	9	9	9	9	9	9
MONITOR SCREEN	4,3"	4,3"	7"	4,3"	4,3"	4,3"
CONVERSATION MODE	With handset	Hands-free	Hands-free	Hands-free	Hands-free	With handset
CAPTURE OF IMAGES	Yes	Yes	Yes	Yes	Yes	Yes
INTERCOM.	No	No	No	No	No	No
COMP. VIDEO SURVEILLANCE	Yes	Yes	Yes	Yes	Yes	Yes
ADDITIONAL MONITORS*	2	2	2	2	2	2
<b>2 WIRES (DUOX PLUS)</b>						

\*Without extra power supply.



# FERMAX

 <b>DUOX PLUS MARINE ONE-TO-ONE VEO-XS WIFI KIT</b>	 <b>DUOX PLUS MEMOVISION VEO WIFI KIT</b>	 <b>DUOX PLUS MEMOVISION VEO-XS WIFI KIT</b>	 <b>WAY-FI KIT*</b>	<b>WAY KIT</b>	<b>WAY SLIM KIT</b>	<b>VEO VDS KIT</b>
						
<b>Marine</b>	<b>cityline</b>	<b>cityline</b>	<b>way-Fi</b>	<b>way</b>	<b>way</b>	<b>cityline</b>
						
<b>VEO XS</b>	<b>VEO</b>	<b>VEO XS</b>	<b>way-Fi</b>	<b>way</b>	<b>wayslim</b>	<b>VEO</b>
<b>50781 (1/W)</b>	<b>49071 (1/W)</b>	<b>49121 (1/W)</b>	<b>1431 (1/W)</b>	<b>1401 (1/W) 1402 (2/W)</b>	<b>1421 (1W)</b>	<b>9411 (1/W) 9412 (2/W)</b>
Yes	Yes	Yes	Yes	No	No	No
2 wires	2 wires	2 wires	2 wires	2 wires	2 wires	5 wires
Flush mounted	Flush mounted	Flush mounted	Surface	Surface	Surface	Flush mounted
No	Yes (keypad)	Yes (keypad)	No	No	No	No
Yes	No	No	No	No	No	No
9	9	9	1	3	3	1
4,3"	4,3"	4,3"	7" touch	7" touch	4,3" touch	4,3"
Hands-free	With handset	Hands-free	Hands-free	Hands-free	Hands-free	With handset
Yes	Yes	Yes	Yes	Yes	No	No
No	No	No	Yes	Yes	Yes	No
Yes	Yes	Yes	Yes	No	No	Yes
2	2	2	2	1	1	1
<b>2 WIRES (DUOX PLUS)</b>			<b>2 WIRES (WAY)</b>			<b>5 WIRES (VDS)</b>



## DUOX PLUS WiFi KITS



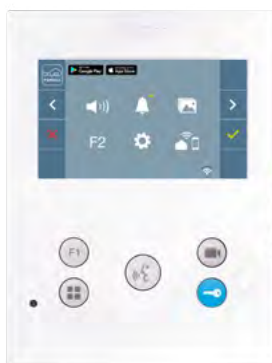
**DUOX PLUS WiFi VIDEO KITS** include the **DUOX PLUS WiFi monitors** with integrated WiFi connectivity. Now it's possible to divert a call from your video door entry system to your smartphone or tablet.

All you need is a DUOX WiFi monitor installed in your home, then download the **free BLUE application** and you will feel just like you are at home.

By pairing your DUOX PLUS WiFi monitors with the BLUE app a whole range of possibilities will be opened up to you. Of all of these possibilities, the following two are key: **Divert the door entry system calls to your mobile device and open the door remotely.**



**VEO**

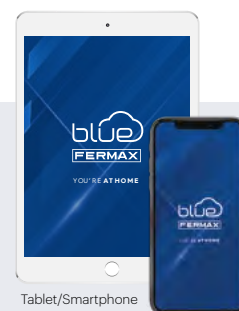
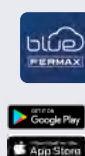


**VEO XS**



**VEO XL**

WHEN YOU PRESS THE BLUE ICON ON  
YOUR MOBILE DEVICE  
**IT'LL BE LIKE "BEING AT HOME"**



Tablet/Smartphone



## 94411

### 1/W DUOX PLUS VEO WiFi KIT



- 40708 1/W Colour DUOX PLUS CITY panel. S1: 130x128.
- 8948 Flush box S1: 115x114x45.
- 9446 4,3" DUOX PLUS VEO WiFi monitor.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 94421

### 2/W DUOX PLUS VEO WiFi KIT

Same as kit ref.94411 but 2/W video panel (ref.40008), 2 VEO WiFi monitors (ref.9446) and their connectors (ref. 9447). Includes 1 line adaptor (ref.3255).

## 94511

### 1/W DUOX PLUS VEO-XS WiFi KIT



- 40708 1/W Colour DUOX PLUS CITY panel. S1: 130x128.
- 8948 Flush box S1: 115x114x45.
- 9449 4,3" DUOX PLUS VEO-XS WiFi monitor.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 94521

### 2/W DUOX PLUS VEO-XS WiFi KIT

Same as kit ref.94511 but 2/W video panel (ref.40008), 2 VEO WiFi monitors (ref.9449) and their connectors (ref. 9447). Includes 1 line adaptor (ref.3255).

## 9471

### 1/W DUOX PLUS VEO-XL WiFi KIT



- 40708 1/W Colour DUOX PLUS CITY panel. S1: 130x128.
- 8948 Flush box S1: 115x114x45.
- 9469 7" DUOX PLUS VEO-XL WIFI monitor.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 9472

### 2/W DUOX PLUS VEO-XL WiFi KIT

Same as kit ref.9471 but 2/W video panel (ref.40008), 2 VEO-XL WiFi monitors (ref.9469) and their connectors (ref. 9447). Includes 1 line adaptor (ref.3255).

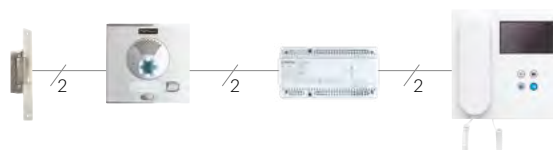
## EXTENSIONS

**INDOOR:** up to 2 terminals without additional power supply (total terminals per home=3). Depending on the type of cable and distances, an additional power supply (ref. 4825), line adaptor ref. 3255 and/or regenerators might be required.

**OUTDOOR:** It is possible to extend the installation by adding more outdoor panels (up to 10). Depending on the type of cable and topology, it may be required an additional power supply (ref. 4825), line adaptors ref. 3255 and/or regenerators.

See ACCESSORIES page 41

## DUOX PLUS INSTALLATION DIAGRAM



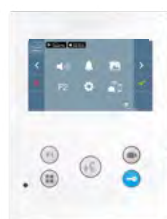
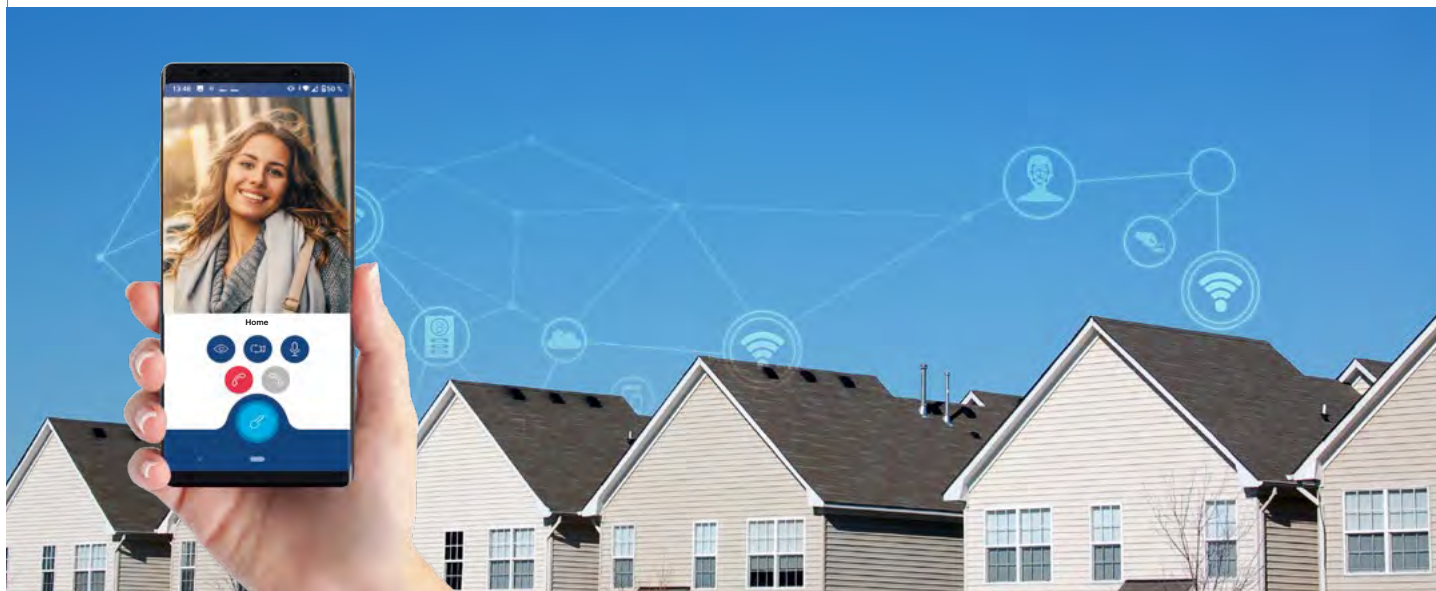
## DISTANCES TABLE

Check the technical manual of the kit.

## VIDEO KITS

RESIDENCES AND BUSINESSES

# DUOX PLUS WiFi KITS



### 50731

#### 1/W DUOX PLUS MARINE VEO-XS WIFI KIT

- 44338 MARINE panel DUOX PLUS ST1: 150x180.
- 4641 Flush box ST1: 130x160x55.
- 9449 4,3" DUOX PLUS VEO-XS WiFi monitor.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

NEW



### 50831

#### 1/W DUOX PLUS MARINE BLACK VEO-XS WIFI KIT

- 44438 MARINE BLACK panel DUOX PLUS ST1: 150x180.
- 4641 Flush box ST1: 130x160x55.
- 9449 4,3" DUOX PLUS VEO-XS WiFi monitor.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

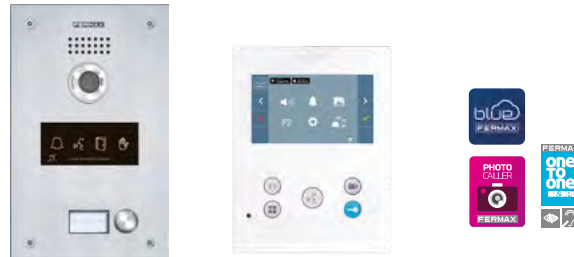
## KITS EXTENSIONS

**INDOOR:** up to 2 terminals without additional power supply (total terminals per home=3). Depending on the type of cable and distances, additional power supply (ref. 4825), line adaptors ref. 3255 and/or regenerators might be required.

**OUTDOOR:** It is possible to extend the installation by adding more outdoor panels (up to 10). Depending on the type of cable and topology, additional power supply (ref. 4825), line adaptors ref. 3255 and/or regenerators might be required.

See ACCESORIES: Marine Panels page 44. Cityline Panels page 40.





## 49081 1/W DUOX PLUS ONE-TO-ONE VEO WIFI KIT

- 73891 1/W DUOX PLUS One-To-One CITY panel with induction loop. Panel S4: 130x199.
- 8949 Flush box S4: 115x185x45.
- 9456 4,3" DUOX PLUS VEO WiFi monitor w/induction loop.
- 9447 DUOX PLUS Connector
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 50781 1/W DUOX PLUS MARINE ONE-TO-ONE VEO-XS WIFI KIT

- 55361 1/W DUOX PLUS One-To-One MARINE panel with induction loop. ST2: 150x240.
- 4642 Flush box ST2: 130x220x55.
- 9459 4,3" colour DUOX PLUS VEO-XS monitor w/induction loop.
- 9447 DUOX PLUS Connector.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A



## 49071 1/W DUOX PLUS MEMOVISION VEO WIFI KIT

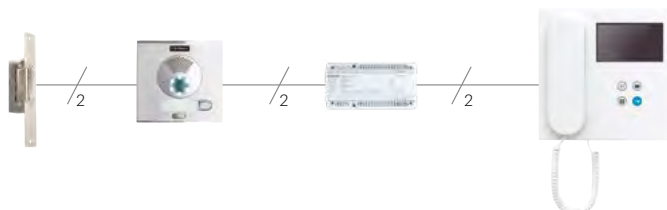
- 73881 1/W DUOX PLUS MEMOVISION panel. S5:130x246.
- 8855 Flush box S5: 115x233x45.
- 9446 4,3" DUOX PLUS VEO WiFi monitor.
- 9447 DUOX PLUS Connector.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A.
- 4802 Power supply DIN4 230Vac/12Vac/1A.



## 49121 1/W DUOX PLUS MEMOVISION VEO-XS WIFI KIT

- 73881 1/W DUOX PLUS MEMOVISION panel .S5:130x246.
- 8855 Flush box S5: 115x233x45.
- 9449 4,3" colour DUOX PLUS VEO-XS monitor.
- 9447 DUOX PLUS Connector.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A.
- 4802 Power supply DIN4 230Vac/12Vac/1A.

### DUOX PLUS INSTALLATION DIAGRAM



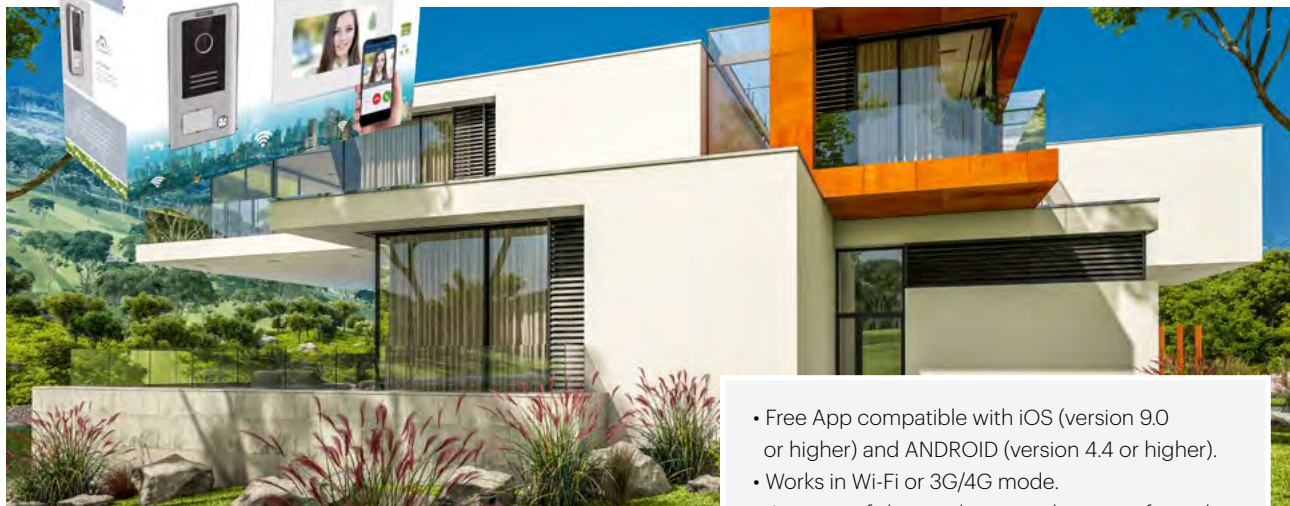
### DISTANCE TABLE

Check the technical manual of the kit.

Dimensions: (width) x (height) x (depth) mm.



## WAY-FI KIT



CONNECTED TO YOUR HOME  
FROM ANYWHERE IN THE WORLD



- Free App compatible with iOS (version 9.0 or higher) and ANDROID (version 4.4 or higher).
- Works in Wi-Fi or 3G/4G mode.
- Auto-on of the outdoor panel camera from the smartphone.
- Door opening from the smartphone (with a PIN code).
- Manual capture of photos or videos.
- Unlimited number of linked smartphones in the same kit.
- Management of several WAY-FI kits from the same smartphone.



### 1431 1/W 7" WAY-FI KIT

- 1438 1/W WAY-FI video panel with hood.  
Panel dimensions with hood: 164x94x39.
- 1436 7" WAY-FI touch screen monitor with Wi-Fi.
- 1440 WAY-FI power supply.

### EXTENSIONS

**INDOOR:** up to 2 additional monitors (total 3).

**OUTDOOR:** up to 1 additional outdoor panel (total 2).

#### WAY-FI MONITORS AND PANELS

- 1436 7" WAY-FI MONITOR
- 1438 1/W WAY-FI VIDEO PANEL WITH HOOD

#### DISTANCES TABLE

Recommen. cable	Section	A: Max. dist. panel-power supply	B: Max. distance pow.sup.-monitor
Twisted pair	2x1mm <sup>2</sup>	80m	80m
	2x0,75mm <sup>2</sup>	60m	60m

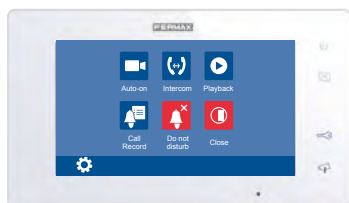
#### ADDITIONAL CAMERAS

1 additional aerial analogue camera can be installed in each outdoor panel (up to 2 cameras in an installation).

- 9980 PERIPHERAL CCTV DOME CAMERA
- 9981 PERIPHERAL CCTV BULLET CAMERA
- 9982 POWER SUPPLY PERIPHERAL CCTV CAMERA
- 9983 PAIR PERIPHERAL CCTV CAMERA
- 9984 POWER ADAPTOR PERIPHERAL CCTV CAMERA

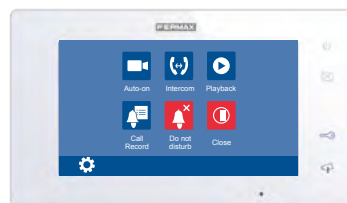
NOTE: Recommended normal door lock release of 12Vdc low consumption ref. 29588 300N-412-S MAX with adjustable latch and S-type short shield. Compatible G-TYPE large shield ref. 2975.

## WAY KITS



### 1401 1/W 7" WAY KIT

- 1416 1/W colour WAY video kit panel with hood.  
Panel dimensions with hood: 95x155x39.
- 1412 7" TFT Colour WAY monitor.
- 1410 WAY power supply.



x2

### 1402 2/W 7" WAY KIT

- 1417 2/W colour WAY video kit panel with hood.  
Panel dimensions with hood: 95x155x39.
- 1412 7" TFT Colour WAY monitor 1 (for 1st home).
- 1413 7" TFT Colour WAY monitor 2 (for 2nd home).
- 1410 WAY power supply.

## EXTENSIONS

**INDOOR:** 1 monitor without additional power supply.

**OUTDOOR:** Up to 3 additional panels using the WAY panel switcher.

### WAY MONITORS AND PANELS

- 1412 7" TFT Colour WAY monitor 1 (for 1st home)
- 1413 7" TFT Colour WAY monitor 2 (for 2nd home)
- 1416 1/W colour WAY video kit panel with hood
- 1417 2/W colour WAY video kit panel with hood
- 1419 WAY SWITCHER/DISTRIBUTOR

It allows for the expansion of the total amount of outdoor panels in a WAY installation, adding up to 3 additional panels (total up to 4 outdoor panels per installation).

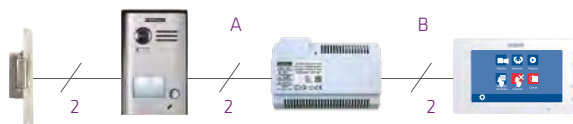
### ADDITIONAL FUNCTIONS



- 1418 WAY RELAY MODULE

It allows to open a second door from the monitor.  
Not compatible with WAY-FI kit.

## INSTALLATION DIAGRAM



NOTE: Recommended normal door lock release of 12Vdc low consumption ref. 29588 300N-412-S MAX with adjustable latch and S-type short shield.  
Compatible G-TYPE large shield ref. 2975.

## DISTANCES TABLE

Recommen. cable	Section	A: Max. dist. panel-power supply	B: Max. distance pow.sup.-monitor
Twisted pair	2x1mm <sup>2</sup>	80m	80m
	2x0,5mm <sup>2</sup>	60m	60m





## WAY SLIM KIT



### 1421 1/W 4,3" WAY SLIM KIT

- 1416 1/W colour WAY video kit panel with hood.  
Panel dimensions with hood: 95x155x39.
- 1425 Colour 4,3" TFT SLIM WAY monitor.
- 1410 WAY power supply.

### EXTENSIONS

**INDOOR:** 1 monitor without additional power supply.

**OUTDOOR:** Up to 3 additional panels using the WAY panel switcher.

#### WAY MONITORS AND PANELS

- 1425 4,3" TFT Colour WAY SLIM monitor 1 (for 1st home)
- 1426 4,3" TFT Colour WAY SLIM monitor 2 (for 2nd home)
- 1416 1/W colour WAY video kit panel with hood
- 1417 2/W colour WAY video kit panel with hood
- 1419 WAY SWITCHER/DISTRIBUTOR

It allows for the expansion of the total amount of outdoor panels in a WAY installation, adding up to 3 additional panels (total up to 4 outdoor panels per installation).

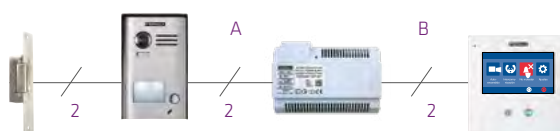
#### ADDITIONAL FUNCTIONS



##### 1418 WAY RELAY MODULE

It allows to open a second door from the monitor.  
Not compatible with WAY-FI kit.

### INSTALLATION DIAGRAM



NOTE: Recommended normal door lock release of 12Vdc low consumption ref. 29588 300N-412-S MAX with adjustable latch and S-type short shield. Compatible G-TYPE large shield ref. 2975.

### DISTANCES TABLE

Recommen. cable	Section	A: Max. dist. panel-power supply	B: Max. distance pow.sup.-monitor
Twisted pair	2x1mm <sup>2</sup>	80m	80m
	2x0,5mm <sup>2</sup>	60m	60m



## VEO VDS KITS



### 9411 1/W VDS VEO KIT

- 48505 1/W colour VDS CITY panel and flush box (ref.8948).  
Panel S1: 130x128 / Flush box S1: 115x114x45.
- 9401 Colour 4,3" VDS VEO monitor.
- 9402 VDS VEO monitor connector.
- 4810 Power supply. 18Vdc/1,5A-12Vac/1,5A. DIN10.



### 9412 2/W VDS VEO KIT

- 48515 2/W colour VDS CITY panel and flush box (ref.8948).  
Panel S1: 130x128 / Flush box S1: 115x114x45.
- 9401 Colour 4,3" VDS VEO monitor (2 units).
- 9402 VDS VEO monitor connector (2 units).
- 4810 Power supply. 18Vdc/1,5A-12Vac/1,5A. DIN10.

### EXTENSIONS

**INDOOR:** 1 monitor or 2 telephones without additional power supply. It is possible to install more monitors or telephones by adding power supplies. (ref. 4812 or ref. 4830).

**OUTDOOR:** It is possible to extend with a second outdoor panel. If it is video, a switcher is required (ref. 2450).






NOTE: Recommended door lock release: normal with unlocking and adjustable latch 990ND-P22 MAX (ref. 67511), or without unlocking (ref.67501 990N-P22 MAX). Large shield compatible with ref.2892 Type L22.





# AUDIO KITS

## RESIDENCES AND BUSINESSES

Choose the DOOR ENTRY KIT that best suits the user's needs.

	DUOX PLUS CITY KIT	DUOX PLUS CITY iLOFT KIT	DUOX PLUS MARINE iLOFT KIT
OUTDOOR PANEL	 <b>cityline</b>	 <b>cityline</b>	 <b>Marine</b>
TELEPHONE	 <b>VEO</b>	 <b>iLOFT</b>	 <b>iLOFT</b>
REFERENCES (No. of Apartments)	49201 (1/W) 49211 (2/W)	50771 (1/W)	50761 (1/W)
TECHNOLOGY	2 wires	2 wires	2 wires
PANEL MOUNTING	Flush mounted	Flush mounted	Flush mounted
INTEGRATED ACCESS CONTROL	No	No	No
No. OF ADDITIONAL PANELS	9	9	9
No. OF ADDITIONAL TELEPHONES	2	2	2
CONVERSATION MODE	With handset	Hands-free	Hands-free
No. OF PUSH BUTTONS	1	3	3
CALL MELODIES	5	5	5
VOLUME CONTROL	Yes	Yes	Yes
"DO NOT DISTURB" FUNCTION	Yes	Yes	Yes
ADDITIONAL FUNCTIONS	No	Yes	Yes
AUTO-ON	Yes	Yes	Yes
2 WIRES (DUOX PLUS)			



DUOX PLUS MEMOPHONE KIT	CITYLINE 4+N KIT	CITY CLASSIC 4+N KIT
 cityline	 cityline	 cityline <b>CLASSIC</b>
 VEO	 VEO	 citymax
49131 (1/W)	4860 (1/W) 4862(2/W)	6201 (1/W) 6202 (2/W)
2 wires	4+N	4+N
Flush mounted	Flush mounted	Flush mounted
Yes (keypad)	No	No
9	6	6
2	3	3
With handset	With handset	With handset
1	1	1
5	1	1
Yes	No	No
Yes	No	No
No	No	No
Yes	Yes	Yes
2 WIRES (DUOX PLUS)	4+N	

## DUOX PLUS KITS



### 49201 1/W DUOX PLUS AUDIO CITY VEO KIT

- 40704 1/W DUOX PLUS CITY panel. S1: 130x128.
- 8948 Kit flush box S1: 115x114x45.
- 3444 DUOX PLUS VEO telephone.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A

### 49211 2/W DUOX PLUS AUDIO CITY VEO KIT

Same as ref.49201 but with 2/W audio panel (ref.40004) and 2 DUOX PLUS VEO telephones (ref.3444).



### 49131 1/W DUOX PLUS AUDIO MEMOPHONE CITY VEO KIT

- 49041 1/W DUOX PLUS MEMOPHONE CITY panel. Panel S5: 130x246.
- 8855 Kit flush box S5: 115x233x45.
- 3444 DUOX PLUS VEO telephone.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A



### 50771 1/W DUOX PLUS AUDIO CITY iLOFT KIT

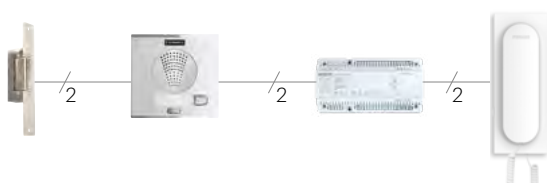
- 40704 1/W DUOX PLUS CITY panel. Panel S1: 130x128.
- 8948 Kit flush box S1: 115x114x45.
- 3450 DUOX PLUS iLOFT telephone.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A
- 4802 Power supply DIN4 230Vac/12Vac/1A



### 50761 1/W DUOX PLUS AUDIO MARINE iLOFT KIT

- 44334 1/W DUOX PLUS MARINE panel. Panel ST1: 150x180.
- 4641 Flush box ST1: 130x160x55.
- 3450 DUOX PLUS iLOFT telephone.
- 4825 Power supply unit+filter DIN10 24Vdc-2.5A.
- 4802 Power supply DIN4 230Vac/12Vac/1A.
- 2008 8 call extension module

## INSTALLATION DIAGRAM



## EXTENSIONS

**INDOOR:** 2 additional telephones.

**OUTDOOR:** up to 9 additional panels.

Dimensions: (width) x (height) x (depth) mm.

# 4+N KITS



## 4860 1/W 4+N CITY AUDIO KIT

- 4845 1/W CITY 4+N panel and flush box (ref.8948).  
Panel S1: 130x128  
Kit flush box S1:115x114x45.
- 3426 VEO 4+N telephone.
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 4862 2/W 4+N CITY AUDIO KIT

Same as kit ref.4860 but with 2/W CITYLINE audio panel (ref.4846) and 2 VEO 4+N telephones (ref.3426).



## 6201 1/W 4+N CITYMAX AUDIO KIT

- 8300 1/W CLASSIC panel and flush box (ref.8948).  
Panel S1: 130x12  
Kit flush box S1:115x114x45.
- 80447 4+N CITYMAX BASIC telephone.
- 4802 Power supply DIN4 230Vac/12Vac/1A

## 6202 2/W 4+N CITYMAX AUDIO KIT

Same as kit ref.6201 but with 2/W CITY CLASSIC audio panel (ref.8301) and 2 CITYMAX BASIC 4+N telephones (ref.80447).

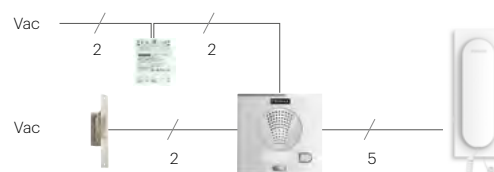
### EXTENSIONS

**INDOOR:** 3 additional telephones. It is possible to extend the installation with more telephones by adding a power supply (ref. 4812) and a call multiplier (ref. 2340).

**OUTDOOR:** It is possible to extend with 2 additional panels. Switchers are required (ref. 8819).

NOTE: Recommended door lock release: normal with unlocking and adjustable latch 990ND-P22 MAX (ref. 67511), or without unlocking (ref.67501 990N-P22 MAX). Large shield compatible with ref.2892 Type L22.

### INSTALLATION DIAGRAM





# AUDIO KITS

BUILDINGS UP TO 24 APARTMENTS

## CITYLINE KITS

FROM 3 TO 24  
APARTMENTS



### KITS EXTENSIONS AND ACCESSORIES

- 2nd Access: Requires panels and flush box + audio switcher (ref.8811) + voltage distributor 12Vac/12Vdc (ref.88231).
- In the apartment: up to 3 telephones (ref.3426) without additional power supply.
- Recommended door lock: 990N-P22 MAX (ref.67501).

**NOTE:** These kits include the Basic amplifier. (See page 92 to find out the differences between Basic and Complete amplifier).

#### 4863 3/W 4+N CITY AUDIO KIT



x3



- 4847 3/W CITY panel and flush box.  
Panel S4: 130x199.  
Flush box (ref.8949) S4: 115x185x45.
- 3426 VEO 4+N telephone (3 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4864 4/W 4+N CITY AUDIO KIT



x4



- 4848 4/W CITY panel and flush box.  
Panel S4: 130x199.  
Flush box (ref.8949) S4: 115x185x45.
- 3426 VEO 4+N telephone (4 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4866 6/W 4+N CITY AUDIO KIT



x6



- 4849 6/W CITY panel and flush box.  
Panel S4: 130x199.  
Flush box (ref.8949) S4: 115x185x45.
- 3426 VEO 4+N telephone (6 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4868 8/W 4+N CITY AUDIO KIT



x8



- 4852 8/W CITY panel and flush box.  
Panel S4: 130x199.  
Flush box (ref.8949) S4: 115x185x45.
- 3426 VEO 4+N telephone (8 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4865 10/W 4+N CITY AUDIO KIT



x10



- 4853 10/W CITY panel and flush box.  
Panel S5: 130x246.  
Flush box (ref.8855) S5: 115x233x45.
- 3426 VEO 4+N telephone (10 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4867 12/W 4+N CITY AUDIO KIT



x12



- 4854 12/W CITY panel and flush box.  
Panel S5: 130x246.  
Flush box (ref.8855) S5: 115x233x45.
- 3426 VEO 4+N telephone (12 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4869 14/W 4+N CITY AUDIO KIT



x14



- 4855 14W CITY panel and flush box.  
Panel S6: 130x294.  
Flush box (ref.8856) S6: 115x280x45.
- 3426 VEO 4+N telephone (14 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4871 16/W 4+N CITY AUDIO KIT



x16



- 4856 16/W CITY panel and flush box.  
Panel S6: 130x294.  
Flush box (ref.8856) S6: 115x280x45.
- 3426 VEO 4+N telephone (16 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4874 18/W 4+N CITY AUDIO KIT



x18



- 4857 18/W CITY panel and flush box.  
Panel S7: 130x341.  
Flush box (ref.8857) S7: 115x328x45.
- 3426 VEO 4+N telephone (18 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4875 20/W 4+N CITY AUDIO KIT



x20



- 4858 20/W CITY panel and flush box.  
Panel S7: 130x341.  
Flush box (ref.8857) S7: 115x328x45.
- 3426 VEO 4+N telephone (20 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4876 22/W 4+N CITY AUDIO KIT



x22



- 4843 22/W CITY panel and flush box.  
Panel S8: 130x389.  
Flush box (ref.8858) S8: 115x375x45.
- 3426 VEO 4+N telephone (22 units).
- 4802 Power supply 12Vac/1A. DIN4.

#### 4877 24/W CITY AUDIO KIT



x24



- 4844 24/W CITY panel and flush box.  
Panel S8: 130x389.  
Flush box (ref.8858) S8: 115x375x45.
- 3426 VEO 4+N telephone (24 units).
- 4802 Power supply 12Vac/1A. DIN4.

See ACCESORIES page 37.

# CITY CLASSIC KITS

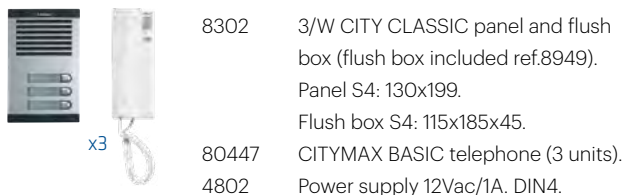
## FROM 3 TO 24 APARTMENTS

### KITS EXTENSIONS AND ACCESORIES:

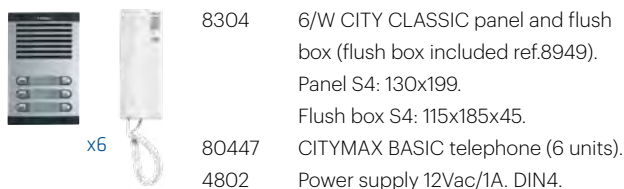
- 2nd Access: Requires panels and flush box + audio switcher (ref.8811) + voltage distributor 12Vac/12Vdc (ref.88231).
- In the apartment: up to 3 telephones (ref.80447) without additional power supply.
- Recommended door lock: 990N-P22 MAX (ref.67501).

**NOTE:** These kits include the Basic amplifier. (See page 104 to find out the differences between Basic and Complete amplifier).

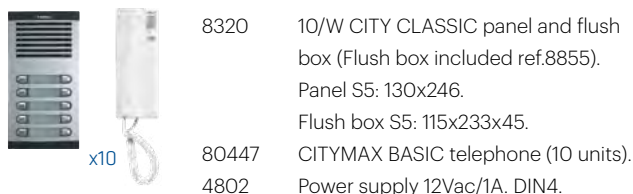
### 6203 3/W 4+N CITYMAX AUDIO KIT



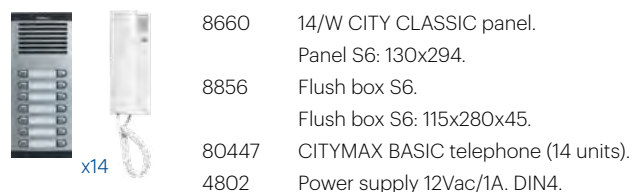
### 6206 6/W 4+N CITYMAX AUDIO KIT



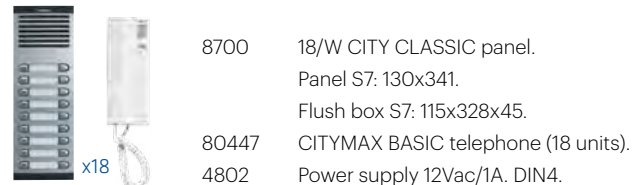
### 6210 10/W 4+N CITYMAX AUDIO KIT



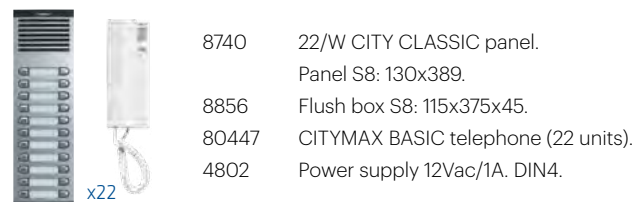
### 6214 14/W CITYMAX AUDIO KIT



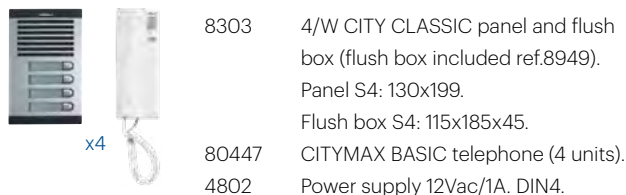
### 6218 18/W CITYMAX AUDIO KIT



### 6222 22/W CITYMAX AUDIO KIT



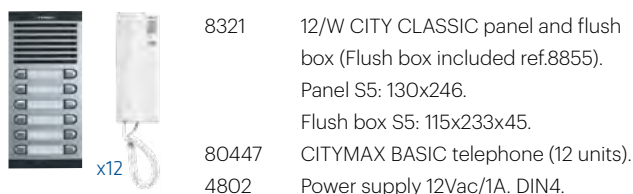
### 6204 4/W 4+N CITYMAX AUDIO KIT



### 6208 8/W 4+N CITYMAX AUDIO KIT



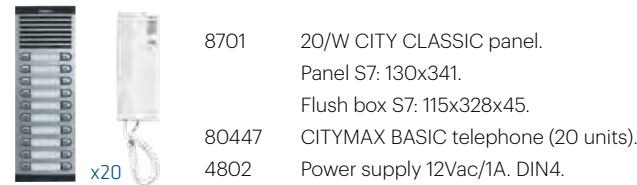
### 6212 12/W 4+N CITYMAX AUDIO KIT



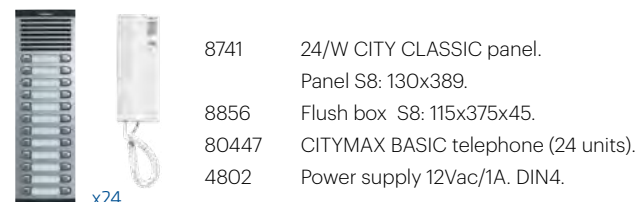
### 6216 16/W CITYMAX AUDIO KIT



### 6220 20/W CITYMAX AUDIO KIT



### 6224 24/W CITYMAX AUDIO KIT







# DUOX PLUS

**FERMAX**





**Solutions for buildings**  
The only fully digital system in 2 wires

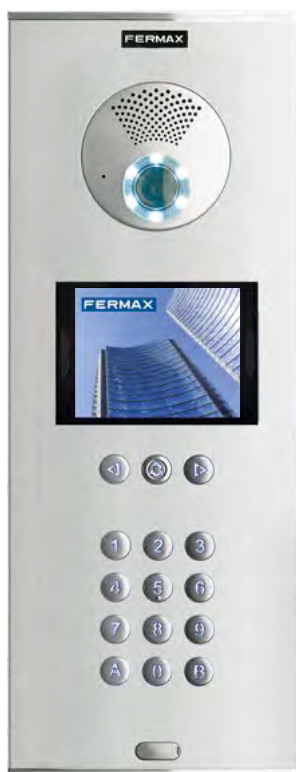
**DUOX**plus



# Outdoor panel



**Fermax MODULAR panel.** It is manufactured in aluminium and can fulfill any requirements which may arise in any residential, industrial or service sector projects. Its modular design and versatility provide total creative freedom to create any imaginable combination.



# cityline

**Monoblock concept panel.** It is characterised by its curved profile. It is manufactured in a highly resistant anodised aluminium.



# MARINE

**Fermax VANDAL-PROOF panel.** It is made in stainless steel. It is the perfect choice for extreme weather conditions places or dangerous environments.

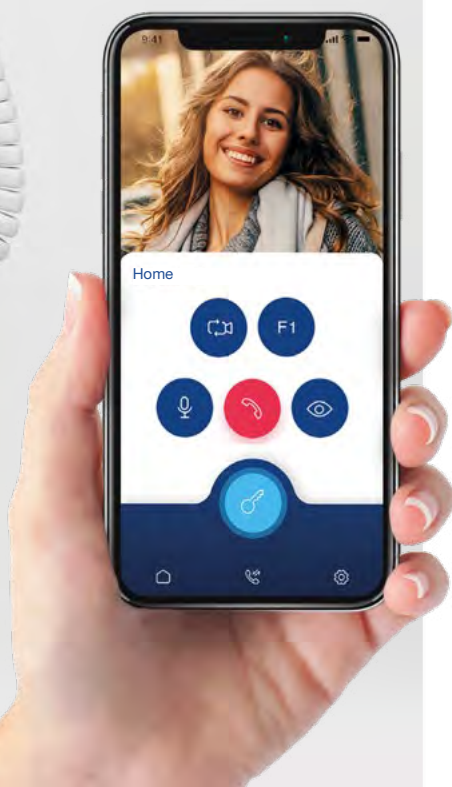




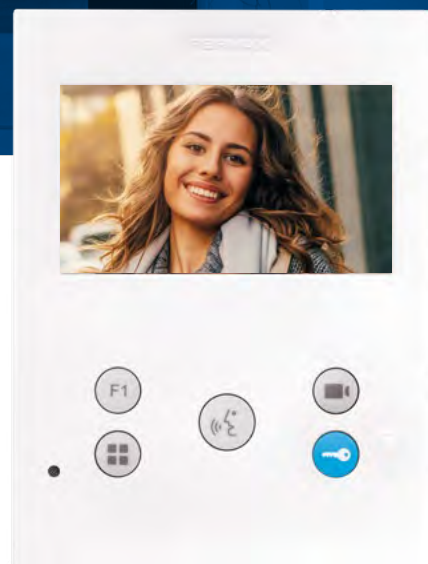
# Indoor terminals



**VEO** 



**VEO, VEO-XS and VEO-XL WiFi** monitors are made from high-impact ABS plastic. VEO and VEO-XS 4.3" monitors and VEO-XL 7" monitor. Handset and hands-free.

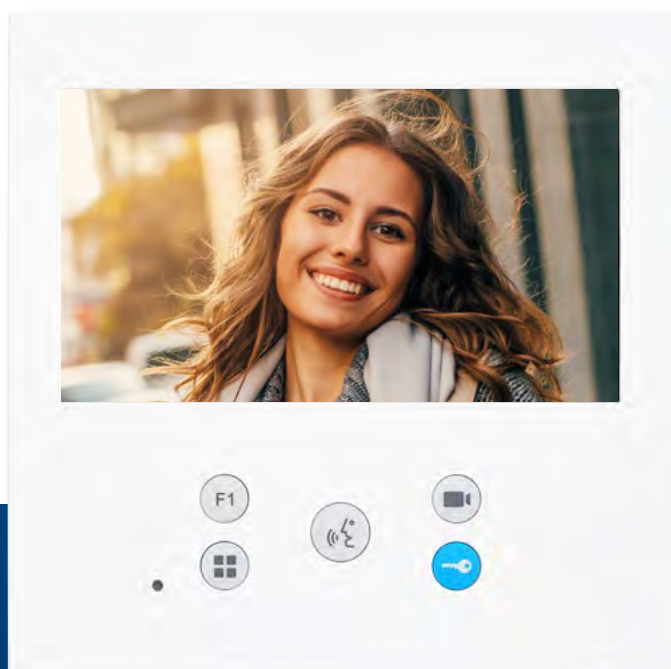


**VEO XS** 

**VEO, VEO-XS and VEO-XL WiFi** monitors are equipped with a WiFi connection, allowing for calls to be diverted to mobile devices.



**FERMAX telephones.** Different aesthetics:  
VEO, LOFT and iLOFT hands-free telephone.



**VEO XL** 

**Audio Guard Unit.** 4.3" touchscreen and  
available in black colour.



TECHNOLOGY: DUOX<sup>plus</sup>  
VIDEO 2 NON-POLARISED WIRES

DUOX<sup>plus</sup>  
by FERMAX

More Powerful

**MORE**  
Capacity

**MORE**  
Technology

**MORE**  
Flexibility

**MORE**  
Functions

**MORE**  
Connectivity



**MORE CAPACITY**

Longer distances.  
Higher voltage, less consumption.  
More terminals per power supply.

**MORE FLEXIBILITY**

More apartments per floor.  
Higher performance with any cable.  
Greater simplicity of installation.

**MORE TECHNOLOGY**

More digitalisation.  
2 simultaneous audio/video communication channels on the same riser.  
More resolution and fluidity on video quality.  
Totally interference-free audio quality.

**MORE FUNCTIONS**

One single connector for all the monitors.  
New VEO telephone.  
Greater angle of vision on the outdoor panel.

**MORE CONNECTIVITY**

All video kits with WiFi monitor as standard.  
Maximum cyber security.  
Faster communication.





**A simplified installation system using only 2 non-polarised wires.** No need for floor distributors or panel switchers. **The transmission of the signal (audio, video and data) is completely digital**, increasing the equipment capacity and robustness against noise and interferences. **Built-in voice guided programming system** in outdoor panels. In the monitors, programming through graphic menu. Telephones can be upgraded to monitors in the home at any time, **without including additional elements**. **DUOX PLUS** installation is up to 50% faster than other intercommunication systems.

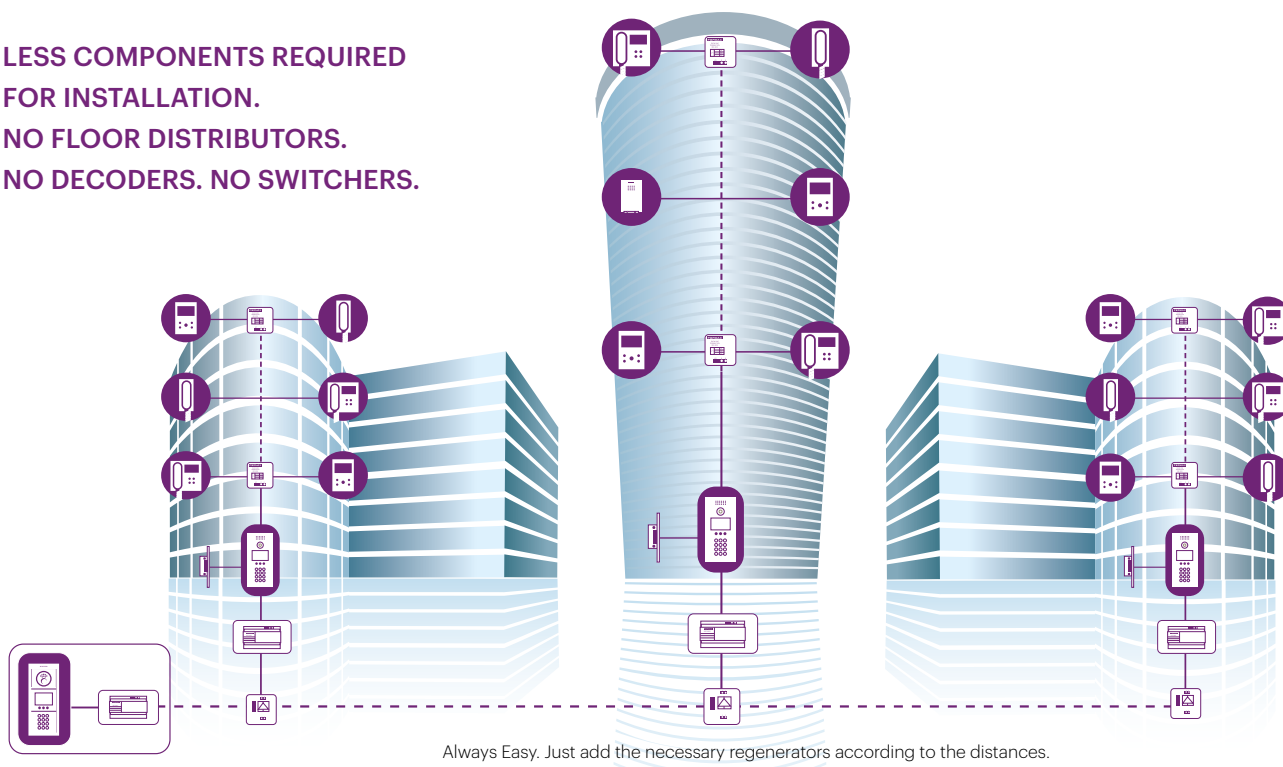


Wiring	Flexible topology with 2 non-polarised wires.
Cables	<ul style="list-style-type: none"> <li>- Parallel (2x1,0mm2)</li> <li>- Twisted pair</li> <li>- UTP CAT5</li> <li>- 2 wires of door bell</li> <li>- 4+N cable</li> </ul> (The dimensioning can change depending on the cable. Recommended cable: parallel 2x1.0 mm2)
Maximum distance between extremes of the installation	3.000m
Maximum point to point distance without regeneration	500m
Connection of the indoor terminals	No need to install distributors or registers in the floors.
Conversation mode	Full-duplex
Power supply	24Vdc
Addresses	Up to 6 digits.
Maximum number of homes	999.999
Structure of the installation	General entrance (up to 10 panels and 10 guard units). 99 blocks (up to 10 panels and 10 guard units per block). 99 sub-blocks (up to 10 panels and 10 guard units per sub-block).
Maximum nº terminals/home	3

**LESS COMPONENTS REQUIRED FOR INSTALLATION.**

**NO FLOOR DISTRIBUTORS.**

**NO DECODERS. NO SWITCHERS.**



## 1. OUTDOOR PANEL



### SKYLINE PANEL

SKYLINE manufacturing materials include anodised aluminium profile, chromed zamak push buttons and reinforcements, polycarbonate transparent elements and stainless steel inner grids (IP43 IK07).

For contemporary installations that require multiple integration systems: information, communication and access control.

Includes a **WIDE ANGLE COLOUR CAMERA** and additional night vision lighting with 6 LEDS (Horizontal angle vision 100°/ Vertical 80°).

Its **VERSALITY** makes it the only panel able to fulfil any requirements which may arise in any residential, industrial or service sector project. Its modular design and versatility provide **TOTAL CREATIVE FREEDOM** to create any imaginable combination.



The module-frame clip-on assembly system is very simple and effective. The modules fit perfectly into the profile. Watertight tapes prevent water and dirt to get in. Once the panel is assembled, the different modules are connected to each other.

SKYLINE consists of **8 DIFFERENT-SIZED FRAMES** where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. **W is twice the size of V.**

## FRAMES



**ref.7341**

1V Series 1  
130x128

**ref.7332**

2V Series 2  
130x151

**ref.7333**

3V Series 4  
130x199

**ref.7334**

4V Series 5  
130x246

**ref.7335**

5V Series 6  
130x294

**ref.7336**

6V Series 7  
130x341

**ref.7337**

7V Series 8  
130x389

**ref.7338**

8V Series 9  
130x436,5

## VIDEO AND AUDIO



**ref.73911**

Video W

**ref.73901**

Audio W

## DOUBLE PUSH BUTTONS



**ref.7371**

8 PUSH. 2x4 W

**ref.7372**

4 PUSH. 2x2 V

**ref.7376**

2 PUSH. 2x1 V

## SINGLE PUSH BUTTONS



**ref.7367**

4 PUSH. 1x4 W

**ref.7368**

2 PUSH. 1x2 V

**ref.7375**

1 PUSH. 1x1 V

## INFORMATION MODULES



**ref.7445**

Panoramic  
cardholder W

**ref.7444**

Panoramic  
cardholder V

**ref.7448**

OneToOne V

**ref.7452**

OneToOne V  
with inductive loop

## ACCESS CONTROL



**ref.7438**

Memokey  
keypad W

**ref.6936**

Fingerprint W

**ref.7440**

Proximity V

## DIGITAL MODULES



**ref.7439**

Direct keypad W

**ref.7450**

Graphic display W

**ref.7457**

Direct digital  
keypad W

## ACCESSORIES



**ref.7443**

Metallic  
complement W

**ref.7442**

Metallic  
complement V

Dimensions: (width) x (height) x (depth) mm.



## SKYLINE MODULES



ref.73911



ref.73901

### VIDEO AND AUDIO MODULES W

- Wide angle colour camera: 100° horizontal angle vision /80° vertical.
- 6 white leds for night vision (ON/OFF).
- Voice synthesiser as standard. "The door is open..." (32 languages).
- Rear adjustment of the speaker, microphone and voice synthesiser.
- Output+12Vdc for lock release.
- Connection for exit button.

**73911** DUOX PLUS VIDEO MODULE W

**73901** DUOX PLUS AUDIO SKYLINE MODULE W



ref.7371



ref.7367



ref.7372



ref.7368



ref.7376



ref.7375

### SINGLE AND DOUBLE PUSH BUTTON MODULES

- Zamak injected call button with chromed finish. 100.000 pressings in 48h guaranteed.
- Polycarbonate card slot. Frontal card slot access. Dimensions: 54x12mm.

**7371** 8 PUSH BUTTONS 2x4 W DUOX PLUS/VDS

**7372** 4 PUSH BUTTONS 2x2 V DUOX PLUS/VDS

**7376** 2 PUSH BUTTONS 2x1 V DUOX PLUS/VDS

**7367** 4 PUSH BUTTONS 1x4 W DUOX PLUS/VDS

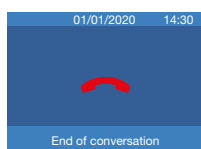
**7368** 2 PUSH BUTTONS 1x2 V DUOX PLUS/VDS

**7375** 1 PUSH BUTTONS 1x1 V DUOX PLUS/VDS

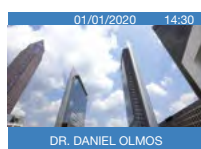


3,5" TFT GRAPHIC DISPLAY

NOTE: It requires to install a DUOX PLUS DIGITAL KEYPAD (ref.7457).



One-To-One



Personalised images

### ELECTRONIC DISPLAY MODULE

The DISPLAY allows search through the list of residents and their allocated door codes (telephone directory type). It indicates the communication status. The keys <▶> allow to move through the menu. Press <📞> to call the residence when dialing the door number on the keypad.

- Integrated ONE-TO-ONE module.
- Images display.
- Personalised messages display.
- Alphanumeric keypad.
- Date and time indicator.

**7450** DUOX PLUS DIGITAL DISPLAY W

Dimensions: (width) x (height) x (depth) mm.



ref.7457  
(panel with display)



ref.7439  
(panel without display)

### KEYPAD MODULES

Blue backlit numeric keypad made of chromed zamak. It includes access control by code (1 code in Direct keypad and 10.000 codes in Digital keypad).

**7457** DUOX PLUS DIGITAL KEYPAD W

**7439** DUOX PLUS/VDS/MDS DIRECT KEYPAD W



ref.7448



### INFORMATIVE MODULES

**7448** ONE-TO-ONE MODULE V

Device that informs on door entry operating using illuminated pictograms: Calling, in conversation, door open or busy channel. Compatible with these technologies: DUOX PLUS, VDS, MDS and 4+N technologies.



ref.7452



**7452** ONE-TO-ONE MODULE WITH INDUCTIVE LOOP V

The same as ref.7448 but including inductive loop for people with a hearing impairment. The loop increases the power consumption of the installation, so it is recommended to resize it accordingly. Only compatible with DUOX PLUS and VDS technologies.



CARDHOLDER W



CARDHOLDER V

### Cardholder with lighting

**7445** PANORAMIC CARDHOLDER W

**7444** PANORAMIC CARDHOLDER V

Allow to cover holes in the outdoor panel for the installation of future modules.



METALLIC  
COMPLEMENT W



METALLIC  
COMPLEMENT V

### METALLIC COMPLEMENTS

**7443** METALLIC COMPLEMENT W

**7442** METALLIC COMPLEMENT V

## SKYLINE MODULES AND FRAMES

### STAND-ALONE ACCESS CONTROL MODULES



KEYPAD  
100 CODES  
ref.7438



FINGERPRINT  
4.500 or 2.970 USERS  
ref.6936



PROXIMITY  
400 USERS  
ref.7440



ref.23361  
Customisable



ref.4515



**23361** EM PROXIMITY CARD



**2336** EM PROXIMITY CARD WITH MAGNETIC BAND



**4515** EM PROXIMITY KEYRING

**2306** PRIVATE PROGRAMMING KEYPAD

It allows to unregister lost identifiers.

**5291** RF BASIC-MINI RECEIVER

To be installed in audio/video door entry panels. Remote control opening with secured code.

**5259** RF KEYSINGLE-MINI EMITTER

**5231** RF KEYSINGLE-PLUS EMITTER 2 PUSH



ref.5291



ref.5259



ref.5231

### SKYLINE FRAMES

Once the modules are selected, choose the frames according to the size.



**7341** SKYLINE FRAME 1V - S1 130x128

**7332** SKYLINE FRAME 2V - S2 130x151

**7333** SKYLINE FRAME 3V - S4 130x199

**7334** SKYLINE FRAME 4V - S5 130x246

**7335** SKYLINE FRAME 5V - S6 130x294

**7336** SKYLINE FRAME 6V - S7 130x341

**7337** SKYLINE FRAME 7V - S8 130x389

**7338** SKYLINE FRAME 8V - S9 130x436,5



**8829 JOINING BOLTS SET**

It allows to combine two or more frames. One set is required for each additional frame installed on flush box.



A cable is required per each additional frame in order to connect the push buttons modules between both frames (70cm).

**2541** DUOX PLUS/VDS CONNECTION CABLE (6W)

**2542** DUOX PLUS/VDS CONNECTION CABLE (5W)

**CITYLINE AND SKYLINE PANELS ACCESSORIES**

	FLUSH BOX	SURFACE BOX	HOOD		MODULAR FRAME*	CITY FRAME		ANGULAR COMPLEMENT
			SINGLE	DOUBLE		SINGLE	DOUBLE	
<b>S1</b>	<b>ref.8851</b> 115x114x45	<b>ref.7061</b> 130x128x33	<b>ref.8400</b> 135x130	-	<b>ref.9191</b> 211x210	<b>ref.8251</b> 225x310	-	<b>ref.8378</b>
<b>S2</b>	<b>ref.8852</b> 115x138x45	<b>ref.7062</b> 130x151x33	<b>ref.8401</b> 135x155	-	<b>ref.9192</b> 211x234	<b>ref.8252</b> 225x310	-	<b>ref.8379</b>
<b>S3</b> <small>CITYLINE only</small>	<b>ref.8853</b> 115x162x45	<b>ref.7063</b> 130x175x33	<b>ref.8402</b> 135x177,5	-	<b>ref.9193</b> 211x257	<b>ref.8253</b> 225x375	-	<b>ref.8380</b>
<b>S4</b>	<b>ref.8854</b> 115x185x45	<b>ref.7064</b> 130x199x33	<b>ref.8403</b> 135x203	<b>ref.8411</b> 265x203	<b>ref.9194</b> 211x281	<b>ref.8254</b> 225x375	<b>ref.8427</b> 355x385	<b>ref.8381</b>
<b>S5</b>	<b>ref.8855</b> 115x233x45	<b>ref.7065</b> 130x246x33	<b>ref.8404</b> 135x250	<b>ref.8412</b> 265x250	<b>ref.9195</b> 211x329	<b>ref.8255</b> 225x375	<b>ref.8428</b> 355x385	<b>ref.8382</b>
<b>S6</b>	<b>ref.8856</b> 115x280x45	<b>ref.7066</b> 130x294x33	<b>ref.8405</b> 135x300	<b>ref.8413</b> 265x300	<b>ref.9196</b> 211x376	<b>ref.8256</b> 225x450	<b>ref.8429</b> 355x460	<b>ref.8383</b>
<b>S7</b>	<b>ref.8857</b> 115x328x45	<b>ref.7067</b> 130x341x33	<b>ref.8406</b> 135x345	<b>ref.8414</b> 265x345	<b>ref.9197</b> 211x424	<b>ref.8257</b> 225x450	<b>ref.8430</b> 355x460	<b>ref.8384</b>
<b>S8</b>	<b>ref.8858</b> 115x375x45	<b>ref.7068</b> 130x389x33	<b>ref.8407</b> 135x393	<b>ref.8415</b> 265x393	<b>ref.9198</b> 211x471	<b>ref.8258</b> 225x450	<b>ref.8431</b> 355x460	<b>ref.8385</b>
<b>S9</b>	<b>ref.8982</b> 115x420,5x45	<b>ref.7069</b> 130x436,5x33	<b>ref.8480</b> 135x440,5	<b>ref.8483</b> 265x440,5	<b>ref.9199</b> 211x519	<b>ref.8259</b> 225x495	<b>ref.8474</b> 355x500	<b>ref.8386</b>

\* To make DOUBLE modular frames, add to the SINGLE frame a DOUBLE PANEL MODULAR FRAME KIT (ref.9200) Horizontal: 341mm.

\* To make TRIPLE modular frames, add to the SINGLE frame a TRIPLE PANEL MODULAR FRAME KIT (ref.9201) Horizontal: 471mm.

## 1. OUTDOOR PANEL



### CITYLINE PANEL

**CITYLINE** is a monoblock concept panel. It is characterised by its curved profile and distinctive push buttons.

There are **9 different panel dimensions** called "SERIES", all with the same width but different height and push button capacities.

It is manufactured in a highly weather **resistant anodised aluminium profile** (IP43 IK7). The push buttons and displays are chromed zamak, the amplifier frontal in aluminium and the interior is protected by a stainless steel grid.

The watertight push buttons are designed and tested in the most demanding conditions to achieve great durability and reliability.

Includes a **WIDE ANGLE COLOUR CAMERA** and additional night vision lighting with 6 LEDs (Horizontal angle vision 100°/ Vertical 80°).

### PUSH BUTTONS CITYLINE PANELS

1. Select the panel required according to the number of apartments in the building. In case of combining several flush mounted panels of the same SERIES, it is required to use joining bolts (ref.8829).
2. Add call extension modules depending on the number of apartments (ref.2008 up to 8, ref.2441 up to 16).  
NOTE: DUOX PLUS Cityline panels S1 (1 and 2 push buttons) don't need call extension modules.
3. Select the flush box or corresponding accessories depending on the SERIES (see accessories table page 41).



ref.8829



ref.2441



ref.2008

- 8829** JOINING BOLTS SET  
**2441** 16 CALL EXTENSION MODULES  
**2008** 8 CALL EXTENSION MODULES

#### SERIES 1 // Panel: 130x128

Flush box (ref.8851): 115x114x45



**ref.40708**  
1 Push.



**ref.40008**  
2 Push.



**ref.40704**  
1 Push.



**ref.40004**  
2 Push.

#### SERIES 2 // Panel: 130x151

Flush box (ref.8852): 115x138x45



**ref.40718**  
2 Push.



**ref.40018**  
4 Push.



**ref.40714**  
2 Push.

Dimensions: (width) x (height) x (depth) mm.

### SERIES 3 // Panel: 130x175

Flush box (ref.8853): 115x162x45



ref.40728  
3 Push.



ref.40724  
3 Push.

### SERIES 4 // Panel: 130x199

Flush box (ref.8854): 115x185x45



ref.40748  
4 Push.



ref.40744  
4 Push.

## DIRECT AND DIGITAL CITYLINE PANELS



ref.73631



ref.7309



ref.73638

Panel dimensions: 130x246 (S5)

Flush box dimensions: 115x233x45 (S5)

### DIRECT CITYLINE PANEL

The DIRECT panels have a keypad to call the apartments. The keypad admits 1 code to open the door. Adding a DIRECTORY PANEL is recommended.

**73631** DUOX PLUS DIRECT VIDEO CITY PANEL S5

**7309** DIRECTORY PANEL S5

**73638** DUOX PLUS DIRECT 1W VIDEO CITY PANEL S5

In addition to being able to call the main guard unit by pressing the "bell key" button, this outdoor panel model also includes a button to call directly any DUOX PLUS guard unit ref. 9423 in the installation (for example, to call the guard unit at the General Entrance from a block panel). The address of the guard unit that is called with this button must be previously configured by the installer.

**73611** DUOX PLUS DIRECT AUDIO CITY PANEL

**73614** DUOX PLUS DIRECT 1W CITY PANEL

**8855** FLUSH BOX S5

**8829** JOINING BOLTS SET

### DIGITAL CITYLINE PANEL

The DIGITAL panels include a KEYPAD and a 3,5" EXTRA display. The keypad integrates access control function (10.000 codes).

**73871** DUOX PLUS DIGITAL VIDEO CITY PANEL S7

**73811** DUOX PLUS DIGITAL VIDEO CITY PANEL PROX S8

**73878** DUOX PLUS DIGITAL VIDEO 1W CITY PANEL S7

**73818** DUOX PLUS DIGITAL VIDEO 1W CITY PANEL PROX S8

In addition to being able to call the main guard unit by pressing the "bell key" button, this outdoor panel model also includes a button to call directly any DUOX PLUS guard unit ref. 9423 in the installation (for example, to call the guard unit at the General Entrance from a block panel). The address of the guard unit that is called with this button must be previously configured by the installer.

**73851** DUOX PLUS DIGITAL AUDIO CITY PANEL

**7310** DIRECTORY CITY PANEL S7

**8857** FLUSH BOX S7

**8858** FLUSH BOX S8

**8829** JOINING BOLTS SET



ref.73871



ref.7310



ref.73878

Panel dimensions: 130x341 (S7)

Flush box dimensions: 115x328x45 (S7)



ref.73811



ref.73818

Panel dimensions: 130x389 (S8)

Flush box dimensions: 115x375x45 (S8)



## SPECIAL CITYLINE PANELS

If you cannot find the desired panel, you can design your own SKYLINE panel or ask for a SPECIAL CITYLINE panel.

<b>7321</b>	SPECIAL CITYLINE PANEL S1
<b>7322</b>	SPECIAL CITYLINE PANEL S2
<b>7323</b>	SPECIAL CITYLINE PANEL S3
<b>7324</b>	SPECIAL CITYLINE PANEL S4
<b>7325</b>	SPECIAL CITYLINE PANEL S5
<b>7326</b>	SPECIAL CITYLINE PANEL S6
<b>7327</b>	SPECIAL CITYLINE PANEL S7

<b>7328</b>	SPECIAL CITYLINE PANEL S8
<b>7329</b>	SPECIAL CITYLINE PANEL S9
<b>8999</b>	SINGLE SPECIAL CITYLINE FRAME (1 PANEL)
<b>89992</b>	DOUBLE SPECIAL CITYLINE FRAME (2 PANELS)
<b>89993</b>	TRIPLE SPECIAL CITYLINE FRAME (3 PANELS)

NOTE: SPECIAL CITYLINE frames are made from aluminium.

## CITYLINE PANELS

### INFORMATIVE MODULES AND COMPLEMENTS



ref.7448

#### 7448 ONE-TO-ONE MODULE V

Device that informs on door entry operating using illuminated pictograms: Calling, in conversation, door open or busy channel. Compatible with technologies: DUOX PLUS, VDS, MDS and 4+N technologies.



ref.7452

#### 7452 ONE-TO-ONE MODULE WITH INDUCTIVE LOOP V

The same as ref.7448 but including inductive loop for people with a hearing impairment. The loop increases the power consumption of the installation, so it is recommended to resize it accordingly. Only compatible with DUOX PLUS and VDS technologies.



ref.7444

#### 7444 PANORAMIC CARDHOLDER V

Informative cardholder with lighting to personalise the building. It indicates the address or use as a resident and door codes directory needed in codified digital panels.



ref.7442

#### 7442 METALLIC COMPLEMENT V

Made of the same material as the aluminium panels. It allows to cover gaps in the panel for future module installations.

Dimensions: (width) x (height) x (depth) mm.

## STAND-ALONE ACCESS CONTROL MODULES

For more information see the section "Access Control".

### 7440 PROXIMITY READER V

It manages up to 400 cards in stand-alone mode. The keypad (ref.2306) allows to unregister lost identifiers. Power supply 12Vac/dc.

It allows door opening when approaching a proximity card to the module.



PROXIMITY READER  
400 USERS  
ref.7440



ref.23361  
Customisable  
card



ref.4515



**23361** EM PROXIMITY CARD



**2336** EM PROXIMITY CARD WITH MAGNETIC BAND



**4515** PROXIMITY KEYRING



ref.5291

### 2306 PRIVATE PROGRAMMING KEYPAD

It allows to unregister lost identifiers.

### 5291 RF BASIC-MINI RECEIVER

To be installed in audio/video door entry panels. Remote control opening with high secured code.



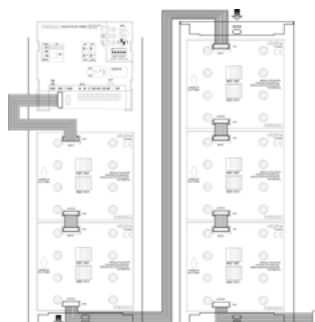
ref.5259

### 5259 RF KEYSINGLE-MINI EMITTER



ref.5231

### 5231 RF KEYSINGLE-PLUS EMITTER 2 PUSH



## CONNECTION CABLES FOR SKYLINE AND CITYLINE PANELS

A cable per additional panel is required in order to connect the push buttons modules between both frames. Dimensions: 70cm.

### 2541 DUOX PLUS/VDS CONNECTION CABLE (6W)

### 2542 DUOX PLUS/VDS CONNECTION CABLE (5W)

## CITYLINE ACCESSORIES

See ACCESSORIES PAGE 39.

## 1. OUTDOOR PANEL



### MARINE PANEL

**MARINE** panel is the Fermax **IP54 IK09** vandal-proof door entry system. Made in stainless steel (2,5mm-thick). AISI 316L stainless steel.

MARINE resists without alterations the most wet and corrosive climates, remaining unalterable over time. It is the perfect choice for extreme weather conditions places or dangerous environments.

**It incorporates voice synthesizer:** "The door is open. Please, close the door behind you" is emitted while the door is opening. Available in 32 languages.

**WIDE ANGLE COLOUR CAMERA** as standard. It includes lighting for vision in conditions of low luminosity (Horizontal angle vision 100°/ Vertical 80°).

### PUSH BUTTONS MARINE PANELS

1. Select the panel required according to the number of apartments in the building. In case of combining several flush mounted panels of the same series, it is required to use joining bolts (ref.2289).
2. The MARINE outdoor panels with push buttons (except 1 and 2 ways VIDEO panels), always require a call extension module, depending on the number of push buttons. (ref. 2008 - 8 call extension module, ref. 2441 - 16 call extension module).
3. Select the flush box or corresponding accessories depending on the series.

#### SERIES ST1 Panel: 150x180

FLUSH BOX (ref.4641): 130x160x55



ref.44438  
Push.



ref.44338  
1 Push.



ref.44348  
2 Push.

**SURFACE BOX**  
(with hood)

ref.4645  
154x184x96

**HOOD** ref.4701

#### SERIES ST2 Panel: 150x240

FLUSH BOX(ref.4642): 130x220x55



ref.44358  
2 Push.



ref.44368  
3 Push.



ref.44378  
4 Push.

**SURFACE BOX**  
(with hood)

ref.4646  
154x244x96

**HOOD** ref.4702

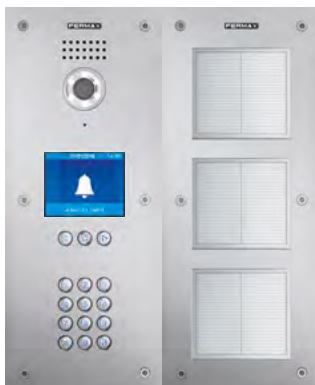
FLUSH OR SURFACE BOX must be requested separately. The surface boxes include a hood.

Note: For other Marine push button panels, see special Marine panels in the following pages.



## DIGITAL MARINE PANEL

- The **DIGITAL MARINE** panel includes a keypad to call the apartments by dialling the door number or the corresponding code.
- A **DIRECTORY DISPLAY** allows to search for the residents and their door number.
- Once the code is dialled, press the BELL KEY to call.
- The metallic keys are made of zamak. It has permanent backlighting.
- Through the keypad it is possible to activate the installation's electric lock with a previously programmed PIN.
- 10.000 different users/codes in DUOX PLUS system.



ref.55261

ref.5471

**55261** DUOX PLUS DIGITAL MARINE VIDEO PANEL ST3

**55281** DUOX PLUS DIGITAL MARINE VIDEO PANEL ST4 PROX

**55268** DUOX PLUS DIGITAL 1W MARINE VIDEO PANEL ST3+

**55288** DUOX PLUS DIGITAL 1W MARINE VIDEO PANEL PROX ST4

In addition to being able to call the main guard unit by pressing the "bell" key, these outdoor panel models also include a push button to call directly any DUOX PLUS ref. 9423 guard unit in the installation (for example, to call from a block panel to the guard unit at the General Entrance). That guard unit address must be previously configured by the installer.

**5471** MARINE ST3 DIRECTORY PANEL



ref.55288

ref.55281

ref.55268

	<b>SERIES ST3</b> Panel: 150x360	<b>SERIES ST3+</b> Panel: 150x420	<b>SERIES ST4</b> Panel: 150x485
FLUSH BOX	<b>ref.4643</b> 130X340X55	<b>ref.4653</b> 130X400X55	<b>ref.4644</b> 130X465X55
SURFACE BOX (with hood)	<b>ref.4647</b> 154x364x96	<b>ref.4654</b> 154x423x96	<b>ref.4648</b> 154x489x96
HOOD	<b>ref.4703</b>	<b>ref.4655</b>	<b>ref.4704</b>

## PUSH BUTTONS AND DIGITAL MARINE PANELS



ref.2289



ref.2441



ref.2008

**2289** MARINE JOINING BOLTS SET FOR FLUSH BOX

**2441** 16 CALL EXTENSION MODULES

**2008** 8 CALL EXTENSION MODULES

Dimensions: (width) x (height) x (depth) mm.



## MARINE ELITE PANEL

FERMAX has a laser-cut machining line for stainless steel panels. This process allows us to offer complete flexibility when it comes to make the MARINE panel required with optimal delivery time for the customised panel.



RAL 9005

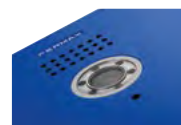
**MARINE** *elite*  
by **FERMAX**

The MARINE Elite panels are available in several colours: indicate the desired RAL when ordering your panel.

RAL 3020



RAL 5005



RAL 9018



RAL 9016



Check for availability in other colours.

## MANUFACTURING PROCESS OF MARINE PANELS



**MARINE ELITE. UNIQUELY FERMAX. SPECIALLY MADE FOR YOU!**



### 3172 SPECIAL MARINE PANEL

The following variations may be ordered:

- Panel with special formats and dimensions.
- Integration of access control modules and special combinations.
- Logotype laser marking. The engraving of panels is only available on the panels with stainless steel colour. Other colours cannot be engraved.
- Residence/Building number and messages integration.
- Push buttons without card slot and free layout.
- Include backlight.

### 4579 SPECIAL MARINE RAINHOOD FOR FLUSH BOX PANEL

### 4580 SPECIAL MARINE FLUSH BOX

### 4581 SPECIAL MARINE SURFACE BOX (WITH HOOD)

You will find the special MARINE application forms at:

[www.fermax.com/intl/en/pro/online-support/special-panels.html](http://www.fermax.com/intl/en/pro/online-support/special-panels.html)



## 2. MONITORS AND TELEPHONES



### VEO, VEO-XS AND VEO-XL WiFi MONITORS



Dimensions: 200x200x23mm (44mm with handset).

**9446** DUOX PLUS VEO WiFi MONITOR



**9456** DUOX PLUS VEO WiFi MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 125x165x21mm.

**9449** DUOX PLUS VEO-XS WiFi MONITOR



**9459** DUOX PLUS VEO-XS WiFi MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 185x185x21mm.

**9469** DUOX PLUS VEO-XL WiFi MONITOR



**9479** DUOX PLUS VEO-XL WiFi MONITOR WITH INDUCTIVE LOOP



#### **9447** DUOX PLUS CONNECTOR

Support for mounting the VEO, VEO-XS and VEO-XL DUOX PLUS monitor on the wall.

Dimensions: (width) x (height) x (depth) mm.

## VEO, VEO-XS AND VEO-XL MONITORS

VEO and VEO-XS 4.3" colour monitors and VEO-XL 7" colour monitors, made from high-impact ABS plastic. Include automatic capture of images with the call (memory up to 150 photos), adjustment of contrast, brightness, colour, audio volume and call tone volume, "do not disturb" function, doorbell, date and time settings, silicone door opener buttons to activate the door opener, access the on-screen OSD menu, activate the outdoor panel camera or any another additional function that can be configured as for example activate a second access, courtesy light, etc. Available in white and surface installation.



## VEO, VEO-XS AND VEO-XL WiFi MONITORS

DUOX PLUS VEO, VEO-XS and VEO-XL WiFi monitors are equipped with WiFi connection that allows to forward calls to mobile devices.

Thanks to Fermal BLUE app, the functions of the video door phone and much more can be managed from a smartphone or a tablet.



<< Scan this QR code to watch the video

### VEO, VEO-XS AND VEO-XL MONITORS



Dimensions: 200x200x23mm (44 mm with handset).

**9445** DUOX PLUS VEO MONITOR



**9455** DUOX PLUS VEO MONITOR WITH INDUCTIVE LOOP

Hands-free. Dimensions: 125x165x21 mm.

**9448** DUOX PLUS VEO-XS MONITOR



**9458** DUOX PLUS VEO-XS WITH INDUCTIVE LOOP

Hands-free. Dimensions: 185x185x21 mm.

**9468** DUOX PLUS VEO-XL MONITOR



**9478** DUOX PLUS VEO-XL WITH INDUCTIVE LOOP



**9447** DUOX PLUS CONNECTOR

Support for mounting the VEO, VEO-XS and VEO-XL DUOX PLUS monitor on the wall.

## TELEPHONES

**VEO, LOFT and iLOFT** telephones include the following features:

- Door opener button and call to guard.
- 5 selectable ring tones.
- Ring volume control.
- Door bell.

**Loft Extra and iLOFT** phones include buttons for additional functions: lights on 2nd door opening, etc. Loft Extra: 2 additional buttons; iLOFT: 1 additional button.



VEO



EXTRA

**VEO. LOFT:** Made of high-impact ABS with a texturised finish for easy cleaning and ultraviolet protection. It has many attachment points for wall mounting, as well a coiled cord with telephone plug connectors. A magnet located in the handset facilitates to hang it up correctly.

Dimensions: 82x214 x43 mm

**3444** DUOX PLUS VEO TELEPHONE

Dimensions: 85x220x40mm

**3452** DUOX PLUS LOFT EXTRA TELEPHONE



iLOFT

**iLOFT:** Compact and extra slim. Made of ABS. iLOFT telephone allows communication with the outdoor panel in hands-free mode. The integrated digital audio technology ensures high-quality and interference-free communication.

Dimensions: 90x146,5x20mm.

**3450** DUOX PLUS iLOFT TELEPHONE

## MONITORS AND TELEPHONES ACCESSORIES



ref.9410



ref.9420



ref.5636



ref.3749

FERMAX desktop supports allow to answer a call to the entrance panel from the office desktop. Made of stainless steel (AISI 316L).

**9410** VEO MONITOR DESKTOP SUPPORT

**9420** VEO-XS AND VEO-XL MONITOR DESKTOP SUPPORT

**3749** VEO/LOFT TELEPHONE DESKTOP SUPPORT

**5636** iLOFT TELEPHONE DESKTOP SUPPORT

FERMAX Decorative Frames are aesthetic complements. Useful in retrofitting applications or replacement of previous equipment.

**3380** LOFT TELEPHONE DECORATIVE FRAME. 200X240

**3388** UNIVERSAL DECORATIVE FRAME. 120X240

**3389** UNIVERSAL LARGE DECORATIVE FRAME. 210X240



ref.3380



ref.3388



ref.3389



**3441** LOFT HANDSET WITH INDUCTIVE LOOP



**3443** VEO HANDSET WITH INDUCTIVE LOOP

Dimensions: (width) x (height) x (depth) mm.



### 3. GUARD UNIT



ref.9423  
Dimensions: 200x200mm  
Desktop support included..

DUOX PLUS Audio Guard Unit has a multi-functional 4,3" capacitive touchscreen and quick function access buttons for easy convenient management. Its unique handset design incorporating a magnet enables the user to put it back into position correctly. It includes a stainless steel desktop support. It allows a surface installation

#### 9423 DUOX PLUS AUDIO GUARD UNIT

Three operation modes:

- **Day:** it receives calls from outdoor panels and apartments. The calls from the outdoor panel to apartments are always received in the guard unit.
- **Mixed:** the calls from the outdoor panels are received in the apartments and it can also be configured to forward them to the concierge unit after 15 s.
- **Night:** only calls from the outdoor panels to apartments are allowed. The guard unit does not receive any call.



### 4. REGENERATORS

It allows to regenerate and amplify the signal in both ways, as well as amplify distances and number of indoor terminals. Moreover, the connected sections to input and output protect against short-circuit, charge and signal reflections mutually. Maximum 5 units in cascade.



ref.3269



ref.3268

#### 3269 2/W DUOX PLUS REGENERATOR

It has 1 input and 2 outputs. By having 2 outputs (also isolated from each other) it enables the number of risers to be increased. Requires 24Vdc power supply without filter (ref. 4840).

For more information: [www.fermax.com/intl/en/pro/documents.html](http://www.fermax.com/intl/en/pro/documents.html)

#### 3268 1/W DUOX PLUS DUAL REGENERATOR

It has 1 input and 1 output. As per factory default settings, electrical energy does not flow, but this can be configured via a dipswitch so that the data (which regenerates) as well as the power supply can pass through. That way there is no need to always install a power supply at the output. The number of devices that can be fed at the output without an additional power supply units will depend on the power that reaches the regenerator.

For more information: [www.fermax.com/intl/en/pro/documents.html](http://www.fermax.com/intl/en/pro/documents.html)

	3269	3268
Number of inputs	1	1
Number of outputs	2	1
Regenerates	YES	YES
Isolates	YES	YES
Incorporates power supply filter	YES	NO
Conversation channel per additional riser	NO	YES
		(in multichannel mode)

## 5. DECODER

NEW



ref.9419

### 9419 DUOX PLUS DECODER/ISOLATOR

10-outputs floor decoder. One output per home, allowing a maximum of one terminal (monitor/telephone) per home. Multiple decoders can be installed on each floor.

Each output regenerates the bus signal, so it acts as a regenerator and allows to increase the diversion distances on a floor up to 100 m.

In the event of a malfunction (short circuit) of any of the decoder's outputs, both the input DUOX PLUS bus and the rest of the outputs will continue to operate normally.

It is not necessary to enter a house to program the address of the terminal since the decoder includes a group of microswitches (dipswitches) to program the addresses of each of its outputs.

The decoder is powered directly from the DUOX PLUS bus.

With mounting on DIN10 rail.

## 6. POWER SUPPLY AND ADAPTORS



ref.3255



ref.4825

### 3255 DUOX PLUS LINE ADAPTOR

Necessary at the beginning and the end of every riser.

### 4825 POWER SUPPLY+FILTER 24VDC-2.5A DIN10

TABLE OF NUMBER OF TERMINALS  
IN FLOOR DISTRIBUTION TOPOLOGY (4 PER FLOOR)

	VEO / VEO-XS MONITOR		VEO-XL MONITOR		Phones
	NO WiFi	WiFi	NO WiFi	WiFi	
1,0 mm <sup>2</sup>	40	28	34	24	80
0,5 mm <sup>2</sup>	40	24	30	18	80
0,2 mm <sup>2</sup>	36	20	24	12	72

TABLE OF NUMBER OF TERMINALS IN CASCADE TOPOLOGY

	VEO / VEO-XS MONITOR		VEO-XL MONITOR		Phones
	NO WiFi	WiFi	NO WiFi	WiFi	
1,0 mm <sup>2</sup>	40	26	30	20	60
0,5 mm <sup>2</sup>	32	20	22	14	45
0,2 mm <sup>2</sup>	18	12	12	10	25



ref.3289



ref.4840

### 3289 DUOX PLUS FILTER 24VDC

In case the ref. 4825 cannot be installed due to lack of space. This filter can be used only with 24Vdc power supply (ref. 4840). Do not use it with 18Vdc. power supply.

### 4840 POWER SUPPLY DIN-6 100-240VAC/24VDC-2A

To be used exclusively with the filter ref. 3289 or with the 2-way regenerator ref. 3269.

### 4802 POWER SUPPLY DIN4 230VAC 12VAC/1A

12Vac for altern current lock release.

### 4800 POWER SUPPLY DIN4 230VAC 12VAC/1,5A

12Vac for altern current lock release.



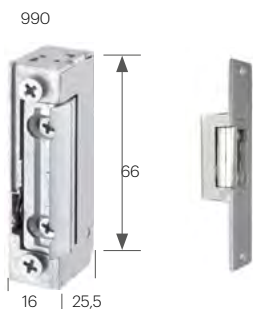
ref.4802



ref.4800

Dimensions: (width) x (height) x (depth) mm.

## 7. DOOR LOCK RELEASE



990 Series consumption

N.A	12Vac 12Vdc	250mA 250mA
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### UNIVERSAL DOOR LOCK RELEASE

#### 67501 UNIV. LOCK RELEASE 990N-P22 MAX 10-24Vac/dc

Normal operation and short shield P22. 10-24Vac/dc.

### UNIVERSAL ELECTRIC STRIKE

#### 6750 UNIV. ELECTRIC STRIKE 990N MAX 10-24Vac/dc

Normal operation 10-24Vac/dc. Requires short shield (S ref.2973 or P22 ref.2894) or large (M ref.2893 or L22 ref.2892).

#### 6752 UNIV. ELECTRIC STRIKE 990A MAX 12-24Vac/dc

Automatic operation 12-24Vac/dc. Requires short shield (S ref.2973 or P22 ref.2894) or large (M ref.2893 or L22 ref.2892).

## 8. ACCESSORIES



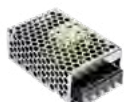
ref.9444



ref.9980



ref.9981



ref.9982



ref.9983

### VIDEO ACCESSORIES

#### 9444 DUOX PLUS CAMERA INTERFACE

The DUOX PLUS camera interface is a device that allows you to integrate CCTV analog composite video cameras in a DUOX PLUS installation. It transforms the analog composite video signal (1 Vpp, 75 ohm) from a camera (PAL / NTSC) into a DUOX PLUS which connects directly to the DUOX PLUS bus.

- An interface is required for each camera installed in a DUOX PLUS installation.
- Each camera must be powered externally with an additional power supply.
- The interface is powered directly by the DUOX PLUS bus.

#### AUTO-ON FUNCTION with installed interface.

In standby, press "camera button" in the monitor to perform an auto-on with different panels / cameras. Pressing in sequence, the display is:

1. Panel 0 or Camera 0 on the block (one or the other).
2. Panel 1 or Camera 1 on the block (one or the other).
3. Panel 0 or Camera 0 on the General Entrance (one or the other).

#### 9980 PERIPHERAL CCTV DOME CAMERA

#### 9981 PERIPHERAL CCTV BULLET CAMERA

The features of these cameras may change without prior notice. See technical specifications.

#### 9982 POWER SUPPLY PERIPHERAL CCTV CAMERA

#### 9983 BALUNS PAIR PERIPHERAL CCTV CAMERA

#### 9984 POWER ADAPTOR PERIPHERAL CCTV CAMERA



NEW



ref.3233



ref.3267



ref.9443

## ADDITIONAL FUNCTIONS

### 3233 DUOX PLUS BASIC RELAY

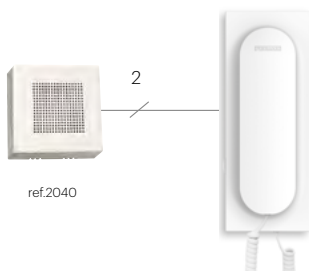
Basic functions. Allows you to activate an additional function from F1 or F2 of the DUOX PLUS terminals, without additional wiring. The relay can also be activated by the call or by activating the lock release. It can be connected at any point of the bus.

### 3267 DUOX PLUS RELAY MODULE

Advanced functions. Allows you to pair 2 relays, 1 as a transmitter and other as a receiver, to perform remote activations. An address can be programmed with the address assistance (001-999) using the DUOX PLUS Programmer ref. 3254 via the relay's telephone connector.

### 9443 DUOX PLUS LIFT CONTROL UNIT

The DUOX PLUS lift control unit ref. 9443 is a model used to provide a lift control service for the DUOX PLUS installation. This allows visitors to access only the floor corresponding to the flat that has opened the door for them. It is an interface between DUOX PLUS and MDS. The MDS Central Unit is responsible for the lift control function, as well as the MDS relay decoders.



ref.2040



ref.2438

## CALL ACCESSORIES

### 2040 ELECTRONIC CALL EXTENSION BELL

Equipment that receives the door entry system call tone, allowing it to be heard in any place where the call extender is located. It is possible to connect 1 per each monitor or handset.

### 2438 LIGHT OR BUZZER ACTIVATOR

It allows to activate high powered devices or indicators when a call is received: bells, sirens, light bulbs, etc. It is possible to connect 1 per each monitor or handset.



ref.5925

## CABLES

### 5925 DUOX PLUS PARALLEL CABLE 2x1mm2

Cables are supplied in 100 metres rolls.



# *Fermax for Real*



With **FERMAX FOR REAL** all the FERMAX video door entry system solutions are within your reach. Choose the one which better suits your needs and see for yourself how our products look like in the home exterior or interior.

# FERMAX



Download our free App  
FERMAX FOR REAL on your  
mobile device







# MEET

**FERMAX**





## Solutions for buildings

The IP system based on point-to-point infrastructure

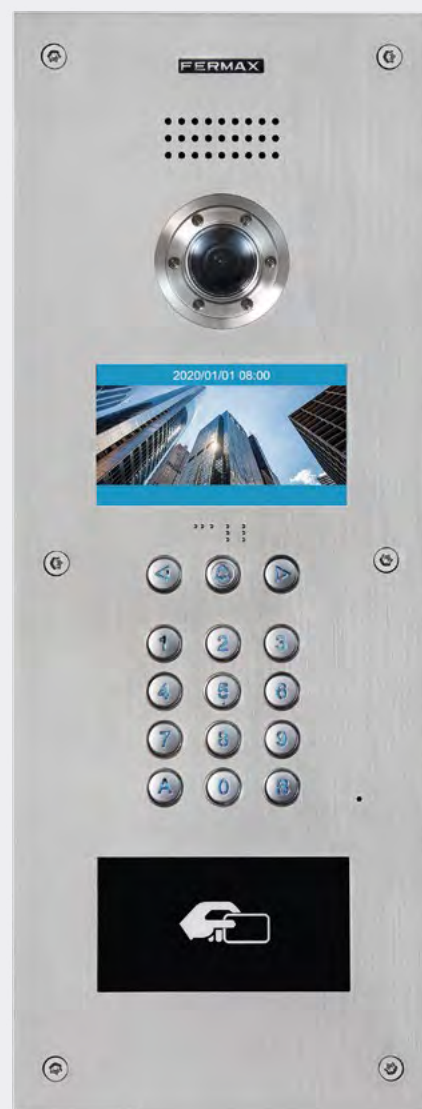
MEET

IP Technology

# Outdoor Panels



KIN



MARINE

# Monitors for residences



neo

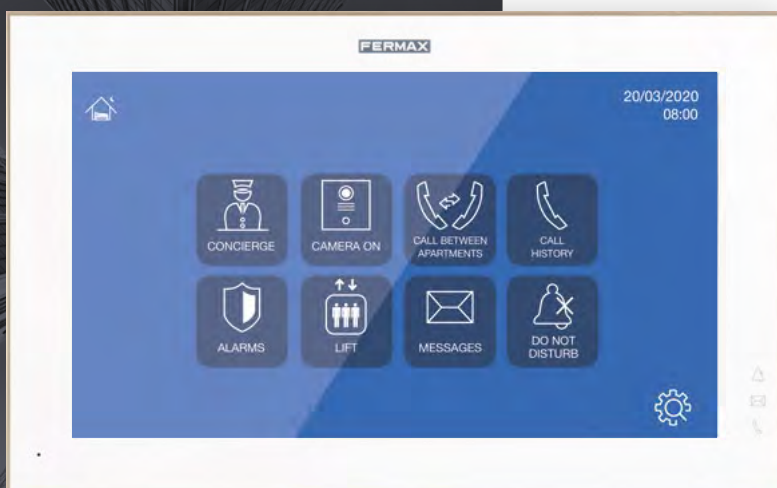
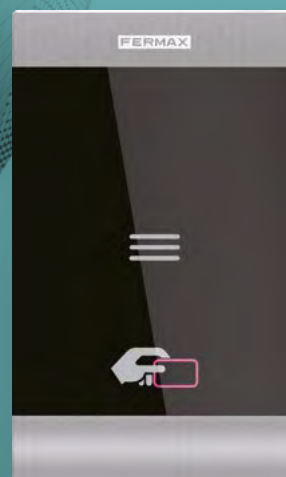
**NEO monitor for modern and urban residences.** Compact design and intuitive, NEO is the perfect complement for your dreamed house.



The system is based on MILO panels with a push button and a proximity reader, two digital outdoor panels, with touch capacitive keypad or robust mechanical keypad; KIN panel with 10" touch screen and MARINE vandal-proof outdoor panel.



MILO



wit

**WIT monitor, the most suitable option for the most exclusive spaces.** Touch screen interface that allows the user to access the monitor's functions in a very easy and comfortable way.



**FERMAX MEET SYSTEM IS A 100% IP SYSTEM BASED ON PEER-TO-PEER INFRASTRUCTURE, HIGHLY EFFICIENT, FLEXIBLE AND WITH HIGH CAPACITY**

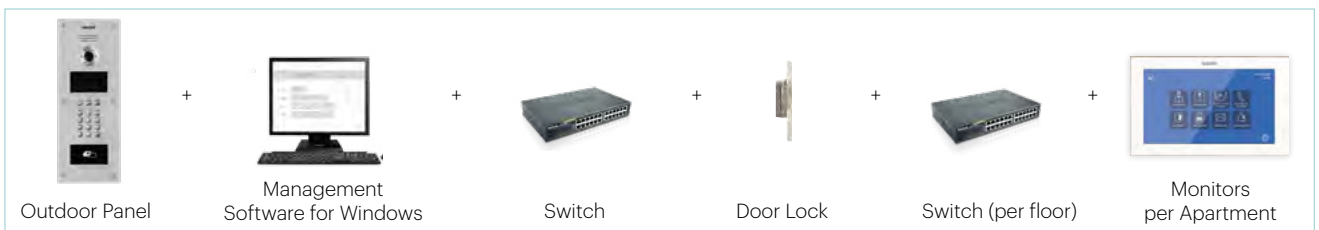


**MEET** system provides superb HD VIDEO QUALITY and crystal clear audio communication. MEET is pure IP, so it allows the installer to define the IP range according to the project needs making the network management easier.

The system is based on panels with touch capacitive keypad or robust mechanical keypad, for indoors and a Guard Unit and two monitor aesthetics.

To ensure the safety of the community, MEET offers a great integration with CCTV cameras. In addition, lift control function provides maximum comfort to users.

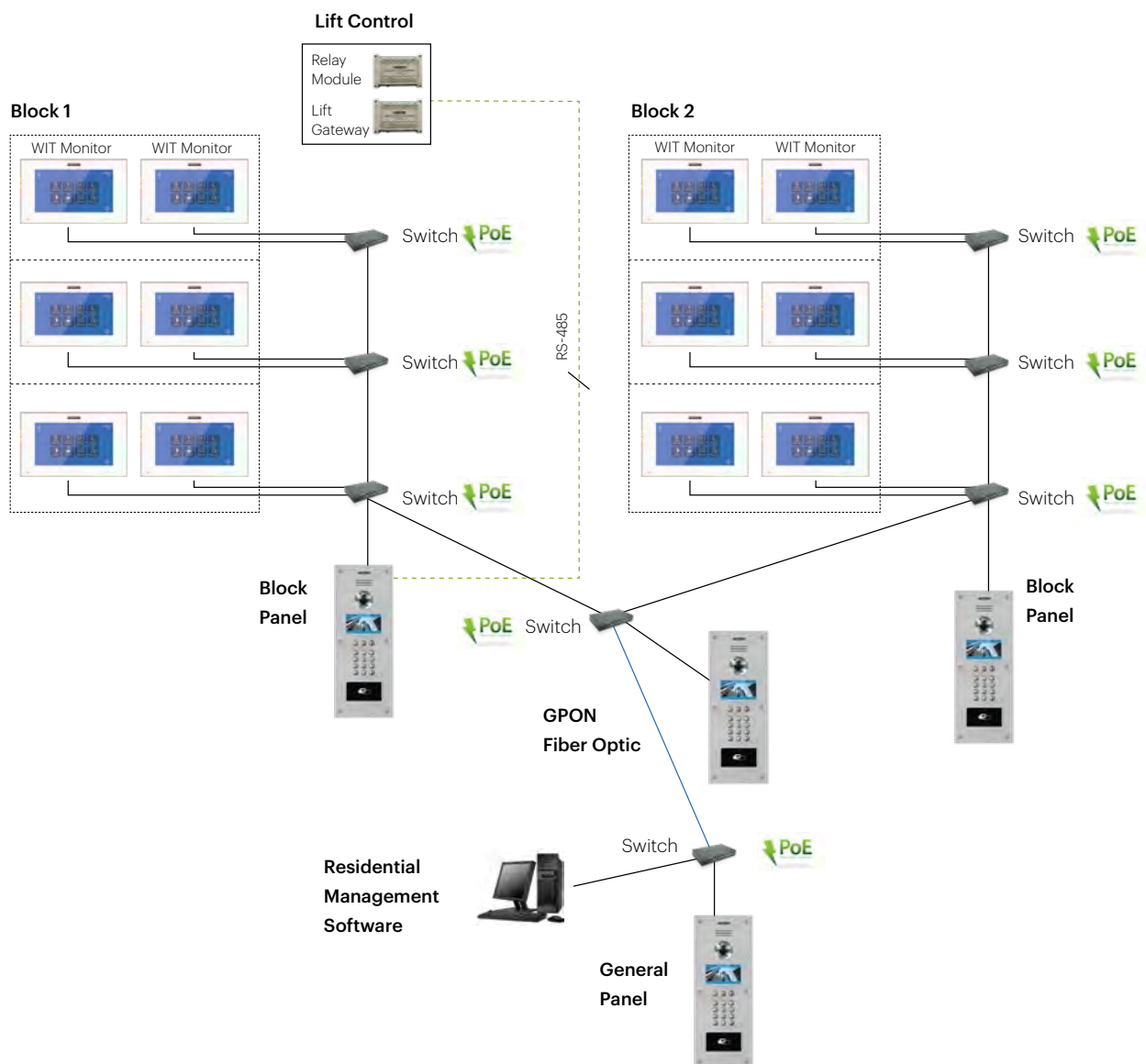
## SYSTEM FEATURES



<b>Wiring</b>	UTP CAT5/CAT6. ( non PoE devices like MILO need PoE splitter or 2 additional wires).
<b>Maximum number of apartments</b>	9899 per block.
<b>Maximum number of outdoor panels</b>	99 per block.
<b>Maximum Number of monitors per apartment</b>	9 (1 master and 8 slaves)
<b>Maximum number of blocks</b>	999
<b>Max. Number of Guard Units</b>	98 guard units (General guard units or block guard units). The master general entrance guard units can be supported by 5 additional slave guard units.
<b>Maximum distances</b>	Unlimited
<b>Private communication panel to apartment</b>	Yes
<b>Monitor Address Configuration</b>	Static IP and apartment/block number.
<b>Voice Synthesiser</b>	Yes
<b>Colour camera</b>	HD Colour Camera as standard 1,2 Mpx (0,5 Lux).
<b>Server required</b>	No
<b>Access Control integration</b>	Yes. MIFARE readers integrated in digital panels as standard. Wiegand input/output on digital panels.
<b>Facial recognition</b>	Up to 6000 users (Residential Management Software required).
<b>CCTV integration</b>	IP RTSP video stream from the panel. IP CCTV video surveillance from the monitor. IP CCTV aerial camera during conversation.



## DIAGRAM



## 1. OUTDOOR PANEL



### KIN PANEL

KIN has a 10" capacitive touch screen and a graphite grey finish at the forefront of design, in addition to having hidden screws and a hidden speaker, with side grille.

#### ELECTRONIC DIRECTORY

Home selection is easy: simply access the electronic directory to quickly search for the apartment you want to call. Navigating through user names is practical and accurate, making it possible to find the resident by choosing the first letter of the alphabet or just browsing the directory up and down.

#### CUSTOMIZABLE TOUCH SCREEN

The user interface is dynamically adapted to the user's needs, guiding the visitor through the process and creating a pleasant user experience. All this thanks to the capacitive touch screen of the KIN panel, which incorporates a high resolution display (1024x600).

#### 1.2Mpx COLOUR HD CAMERA

The camera has a high-definition image, providing excellent video quality. The camera is equipped with LED lighting for low light conditions. It is possible to send video stream directly from the panel to an IP CCTV security NVR using RTSP stream.

#### ALPHANUMERIC CALL

Thanks to its display it is possible to call through alphanumeric codes from A to H, such as 7B or 121F.

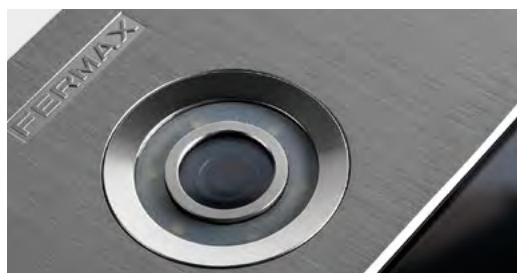
#### PROXIMITY READER\*

In addition to offering great security features with the MIFARE proximity reader, the KIN panel supports integration of third-party readers such as HID and Wiegand.

#### FACE RECOGNITION\*

It is possible to open the door and call the lift using the KIN face recognition system, allowing residents to access the condominium building quickly, and providing greater security and comfort to the system.

\* For the configuration of proximity cards and facial recognition, it is required the residential management SW and the key ref.9540.



Dimensions: (width) x (height) x (depth) mm.

#### 1445 KIN TOUCH PANEL MEET

Panel: 185x405x50 mm

#### 1449 KIN PANEL FLUSH BOX MEET

Panel: 170x382x58 mm

#### 9516 KIN PANEL SURFACE BOX MEET

Panel: 189x413x6,5-110 mm



NEW



## MARINE PANEL

The resistance of the stainless steel combined with the Fermax technology and design. The MARINE MEET outdoor panel is the Fermax vandal-proof audio and video door entry panel. Made in **stainless steel 316L, 3mm-thick**. It is a highly resistant panel due to its excellent quality in terms of both materials and production and assembly process.

### MAXIMUM RESISTANCE

This video door entry panel is recommended for projects where the high level of security is required or in places with extreme weather conditions. All this thanks to its compact design and sealing that guarantees reliability and resistance against external factors **IP54** and the **IK09** impact resistant rating. MARINE is a video door entry solution that resists the wet and corrosive climates and extreme temperatures of -40°C, +70°C.

### 1.3 Mpx HD CAMERA

The camera provides a high definition image reverting in an excellent video quality. The camera is equipped with LED lighting for low-light conditions. Additional video output RTSP IP.

### ADAPTED TO ALL

It includes a wide-angle camera with **horizontal vision angle 128° and vertical 70°**. This facilitates the installation and use of the panel in the event of visitors in wheelchairs.

It is engraved with **Braille** which allows you to identify the call key via engraving on the panel surface.

### SECURITY AS STANDARD\*

Cutting-edge technology used in **face recognition**.

Thanks to the **proximity reader** with MIFARE technology you can open the door dialling a code on the panel keypad or by sending the code to an external access controller that validates the access.

### DISPLAY MODULE WITH DIRECTORY

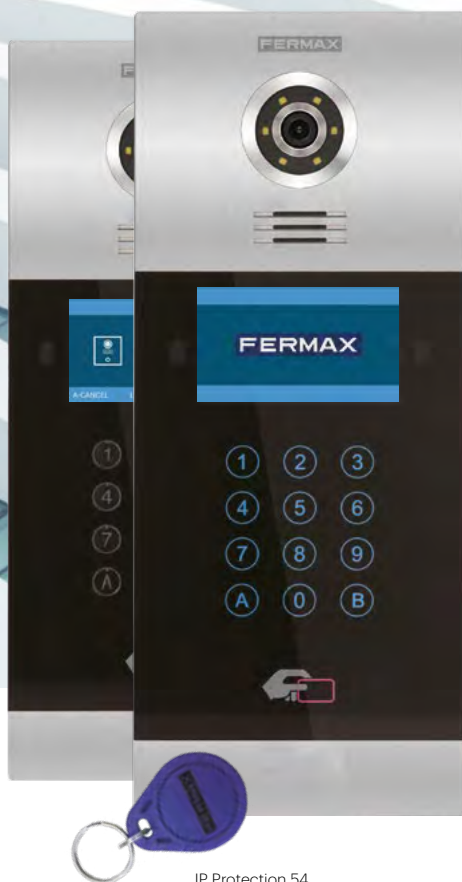
Welcome logo or on-screen information useful for visitors. Thanks to the electronic directory you can search for any name or apartment that you wish to call.

\* For the configuration of proximity cards and facial recognition, it is required the residential management SW and the key ref.9540.



For more technical information please check the table and diagrams section at the end of this catalogue.

- 1455**    **MARINE DIGITAL VIDEO PANEL MEET**  
155x 410x 49mm
- 1456**    **MARINE DIRECTORY PANEL MEET**  
155x410x49mm
- 1458**    **MARINE PANEL SURFACE BOX MEET**  
159x412x63.5mm
- 1459**    **MARINE PANEL FLUSH BOX MEET**  
141x394x60mm
- 14591**   **MEET FLUSH BOX JOINING BOLTS SET**  
Separation between 14mm flush boxes



IP Protection 54  
Panel: 155(W) x 380(H) x 48(D)mm  
\*12Vdc Power Supply required.



ref.9531



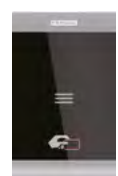
ref.9532



ref.9533



ref.9534



ref.9535

## MILO PANEL

Mechanical and touch, two different designs for smooth and accurate keypad use, to meet the different requirements of customers.

### LCD DISPLAY. DIGITAL VERSION

High contrast 4,3" TFT display module.  
The display shows the communication status: calling, busy, etc.

### HD COLOUR CAMERA OF 1.2 MPX

The camera provides a high definition picture reverting in an excellent video quality.  
The camera is equipped with LED lighting for low-light conditions.  
Additional video output RTSP IP.

### HIGH PROTECTION DIGITAL KEYPAD

Backlight keypad allows to dial in poor light conditions.  
Its compact design guarantees reliability and resistance in any environment. IP54.

### FACE RECOGNITION (Digital MILO Panel)

It is possible to open the door by face recognition, enabling the opening to the residents in the community and increasing the safety and comfort of the system.

### ACCESS CONTROL BY PROXIMITY

MIFARE proximity access control reader included. Access can be granted to users reinforcing the security of the building.  
It also allows to connect a third-party reader directly to the panel or receive the information from the card through the Wiegand output to integrate it into external controllers (digital panel).

\* For the configuration of proximity cards and facial recognition, it is required the residential management SW and the key ref.9540.

### 9531 MILO DIGITAL VIDEO PANEL MEET

### 9532 MILO TOUCH VIDEO PANEL MEET

Panel: 155x380x48mm. 1,2 Mpx

### 9536 DIRECTORY MILO PANEL MEET

Flush box 143x357x58mm

### 9542 MILO PANEL FLUSH BOX- L MEET

Flush box 143x357x58mm

### 9517 MILO DIGITAL PANEL SURFACE BOX MEET

Flush box: 160x387x66-108mm

### 9533 1/W MILO VIDEO PANEL MEET

### 9534 1/W MILO VIDEO PANEL WITH PROX MEET

Panel: 118x183x49mm. 1 Mpx.

### 9535 MEET PROXIMITY READER

Panel: 118x183x49mm.

### 9543 MEET PANEL FLUSH - S

Flush box: 105x172,5x63mm

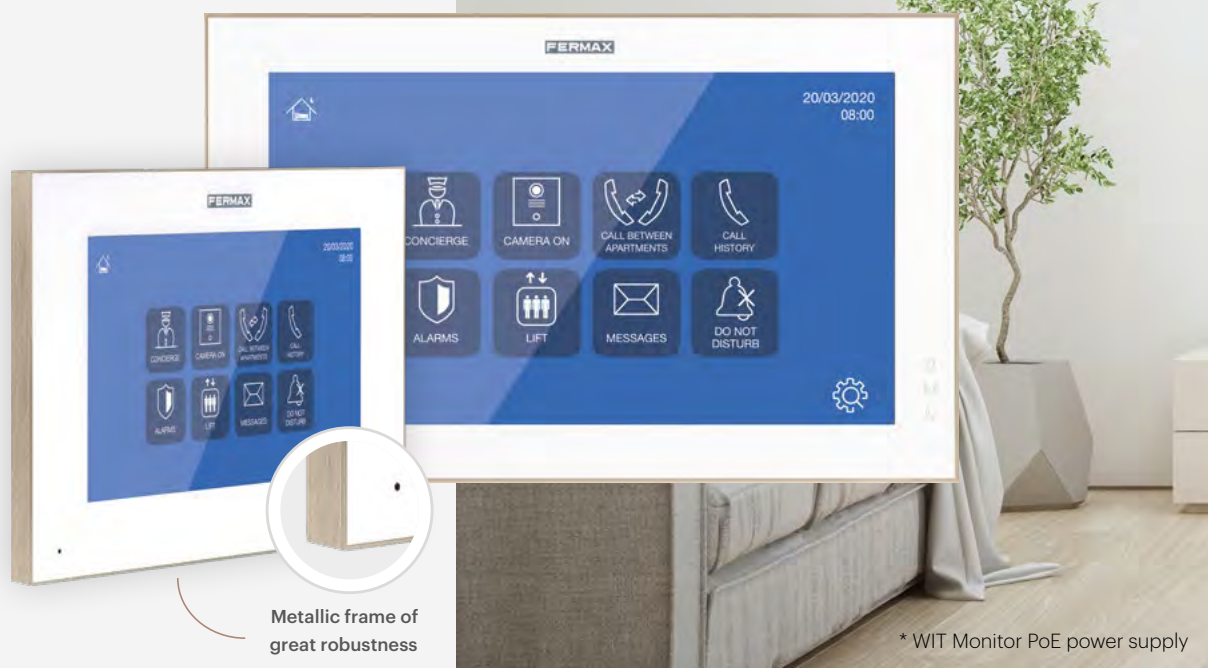
### 9518 1/W MILO PANEL SURFACE BOX MEET

Flush box: 123x190x66-106mm

### 14591 MEET FLUSH BOX JOINING BOLTS SET

Separation between 14mm flush box

## 2. MONITORS



The **new WIT monitor** presents a renewed and distinguished aesthetic for the most exclusive environments. It includes a metallic frame that offers a greater robustness to the monitor design.


WIT touchscreen interface lets the user to answer calls and to manage missed calls, view and download the captured images, read the messages sent by the administrator, **visualize the video surveillance cameras, activate external relays**, notify alarms in the monitor and the guard unit, and even control the home automation in the apartment.

The exclusive aesthetics of WIT is supported by avant-garde technology that allows the installation of APPs\*, which increases the added value and functionality of the monitor.

For a simpler installation, **WIT monitors can be powered by PoE switches**, which means that it is not required a dedicated power supply.

The **10" WIT monitor** is specially designed for integration with Home Automation, since it is the only monitor that incorporates **two RJ-45 network interfaces**, being able to connect to both, the building IP network and the apartment local network. Therefore maintaining the isolation between networks and the flexibility in connectivity. Its surface or flush mounted installation allows to adapt the solution to the most demanding architectural designs.



-  **14701 7" WIT MONITOR PoE WHITE MEET**
- 14703 7" WIT MONITOR PoE BLACK MEET**  
1 connector RJ-45. Dimensions: 212x132,5x20mm
- 14811 10" WIT MONITOR HOME AUTOMATION PoE WHITE MEET**
- 14813 10" WIT MONITOR HOME AUTOMATION PoE BLACK MEET**  
2 connectors R-J45. Dimensions: 270x168x20mm
- 1489 10" WIT MONITOR FLUSH BOX MEET**  
Dimensions: 255x155x50mm
- 9541 MIO/WIT MONITOR CONNECTOR MEET**  
Mounting support for the MIO/WIT monitor on the wall.  
Includes monitor connection cables.
- 1485 MONITOR DESKTOP SUPPORT MEET**  
Compatible with the MEET monitors. Connector ref. 9541 is required for its installation.

\*The installation of APPs has to be done by an authorised professional. Apps must be compatible and certified by FERMAX.



NEW



The new **NEO Monitor** is a symbol of modern urban residences represented by its compact and minimalistic design. Cool, elegant and intuitive, NEO is the perfect complement for your dreamed house.

An advanced management monitor, with hands-free communication, digital audio quality and high definition video. Its **7" TFT incorporates a capacitive touch screen** that offers a user-friendly experience by means of graphic icons and notification LEDs (missed calls, messages, do not disturb).

**NEO** is not only distinguished by its outer elegant simplicity, but also by the most user-friendly menu oriented to residential communication.

- It enables the **intercommunication** between the monitors in the same house as well as with other apartments.
- The monitor manages **7 alarm zones** plus tamper that can be activated or deactivated according to 3 scenarios: DAY, NIGHT and OUT. Alarms are notified to the Guard Unit and management software.
- It is possible to activate up to 8 external relays by using the relay module ref.1616.
- Up to 8 CCTV IP cameras visualization.
- PoE Power Supply



ref.9541



ref.1485



14501

**NEO 7" MONITOR PoE WHITE MEET**

Dimensions 203x129x17.5 mm

9541

**NEO/WIT MONITOR CONNECTOR MEET**

Mounting support for the NEO/WIT monitor on the wall. Includes monitor connection cables.

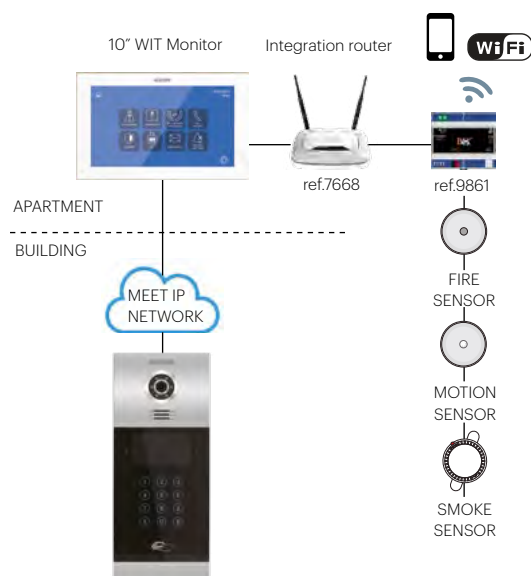
1485

**MONITOR DESKTOP SUPPORT MEET**

Compatible with the MEET monitors. Connector ref. 9541 is required for its installation.

NEO monitor does not allow installation of APPs

### 3. HOME AUTOMATION INTEGRATION



MEET provides full freedom of choice through solutions adapted to other existing home automation systems and technologies. This system generates synergies by means of unlimited solutions, enabling the integration, interaction and compatibility with other technologies.

On MEET installations, the 10" WIT monitor allows to integrate an application for the home automation management. It requires the Web BUSing server (ref.9862) o KNX Web server (ref.9861). These servers also enable a mobile remote control for home automation.

## GATEWAYS

9861 ETHBUS-KNX WEB SERVER

7668 MEET-HOME AUTOMATION INTEGRATION ROUTER

## 4. CALL DIVERT



With MEET, you can receive calls on the mobile phone. It comes as a standard option with your monitor that allows communication with the entrance panels and to open doors. **Allows to view who is calling before answering the call.**

As easy for the user as downloading the free APP MEET ME on Google Play or Apple Store. Just enter the user and password included in the monitor. Up to 8 smartphones in the same apartment can receive the call simultaneously.

The installation cannot be easier: it does not require additional devices in the installation. Just connect the MEET IP network to the Internet\*. Thanks to MEET ME Cloud architecture, the installation is simple.

## 1496 MEET ME CALL FORWARDING LICENSE

This license comes included as standard on MEET monitors, so it is only necessary when there is no monitor in the house

\* Common Internet access to the building is required for MEET ME call forwarding. Internet access with enough upload bandwidth is necessary based on the network traffic generated by the outdoor panels.

## 5. GUARD UNIT



Dimensions: 311 x 203 mm

\*12Vdc power supply necessary.

Ergonomically designed to provide a comfortable use, the MEET Guard Unit integrates a great touchscreen for an intuitive interaction.

MEET guard unit is the desktop device that will enable a concierge to communicate with any panel or apartment.

**Its 9" touch screen** enables the guard unit to receive alarms from monitors and panels. Thanks to its user interface it is possible to review any missed calls and communicate later with the apartment.

### FEATURES

- Aluminium profile
- Resistant touch screen panel
- **Handset** or **hands-free** audio communication
- 9" colour TFT screen
- Audible and visual alarm notifications
- **It can be integrated with CCTV IP camera** by RTSP (concierge camera).
- Automatic answering function of panels.

9539 MEET GUARD UNIT

## FEATURES

### CALL TO APARTMENT

The property management or concierge is able to contact any resident of the community using the guard unit's call to apartment function. The concierge must enter the block number and/or apartment number to call. If an IP camera is connected to the guard unit, a video communication between concierge and apartment is established, otherwise it is only audio communication.

### CALL LOG

The concierge can have a clear view of their call history in the CALL LOG interface and browse through the pictures taken.

Maximum number of call logs: 20.

The Guard Unit allows audio and video recording when the call from panel is not answered.

### GUARD TO GUARD CALL

Guards can call each other when needed.

To call a guard unit, the user must enter the guard unit's number. For instance, if the main guard unit is to be contacted the concierge should enter 9901 to establish the call.

### ALARM LOG

The guard unit provides a quick view of the most recent alarm events. These records can be found at the ALARM LOG interface. Each record includes: date and time, apartment or panel number and triggered alarm zones.

Maximum number of records: 500.

The administrator can access to a complete alarm record using the management software.

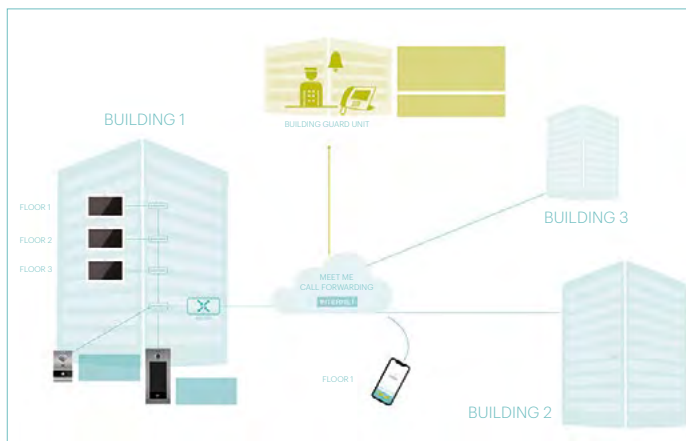
### CAMERA ON

The guard unit can connect to any digital panel and open the video channel when needed by simply entering the panel's number. Once connected the guard can take pictures, open the audio channel, open the door or simply hang up.



## 6. ADVANCED FEATURES

### GUARD UNIT FOR MULTIPLE APARTMENTS



Different **outdoor panels** from different buildings can call one or several remote guard units.

These remote guard units can call and connect with the outdoor panels.

It is only necessary to acquire one **REF.1496 MEET ME LICENSE** per guard unit for its use at the desk concierge. This license allows the concierge to register on the MEET ME cloud server.

### COMPATIBILITY WITH SIP

#### ANSWER THE CALL FROM A PERSONAL COMPUTER

SIP compatibility allows receiving calls from the outdoor panels on a computer. For this, it is required to have a Voice over IP software, compatible with SIP, installed on a computer, such as LINPHONE. The integration with IVMS software for managing installations is also possible, which incorporates SIP clients such as GENETEC - Sipelia.



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#### ANSWER THE CALL FROM A TELEPHONE SYSTEM

In the installations where an IP telephone system compatible with SIP already exists, such as in offices or shopping centres, it will be possible to answer the call from one of the telephones previously installed. Thanks to the SIP compatibility, the FERMAX outdoor panels will be an additional extension to the IP telephone central guard unit and calls from the panels will be received at the terminals assigned in the central guard unit.



### GPON OPTICAL FIBER



- Being a 100% IP system, there is no distance limit because it can be installed in fiber optic infrastructures such as GPON.
- The main advantage is that the cost of the network infrastructure is much lower than an Ethernet or conventional active fiber optic network.
- There can be numerous IP services on the same infrastructure such as IP TV, IP voice calls, IP CCTV, etc. As a result, the costs of the infrastructure are shared between several services.

7 ALARM + TAMPER  
DETECTION  
ZONES



## TECHNICAL CAPABILITIES

- 1 Virtually unlimited number of units can run under MEET installation.
- 2 Unlimited distances from end to end of the installation.
- 3 Multichannel for conversations and data flows, with unlimited capacity.
- 4 GPON fiber optic infrastructure compatible.

## WIRING

- CAT5 CABLE
- FIBER OPTICS\*
- ALARM
- LIFT

\* A converter is required to switch from UTP to FO.



## MODERN PROTOCOL

Flexible, quick and adaptable. Fermax MEET is a highly efficient peer to peer IP protocol based system. Easy to install, debug and maintain. MEET system's flexible IP addressing eases the network management structure.

Decentralised architecture communication structure allowing each terminal to work independently without a need of a centralised server. The system is compatible with GPON networks.

## GRAPHICAL USER INTERFACE

Easy, intuitive and user friendly. Meet system uses universal icons that represent each single function, making it accessible to everyone.

## COMPLETE SOLUTION

Communication, alarms, lift control\* and access control. MEET allows to communicate with the visitor and offer them a safe pass through doors.

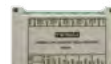
Its centralised alarm infrastructure provides a 24/7 protection against intrusion and the unexpected. Its complete lift control function allows you to see the lift's status clearly, there is no need to worry that you will miss the lift again.



ref.52740



ref.52750



ref.1616



ref.9538



ref.9540

- 52750 PROXIMITY CARD MIFARE FERMAX**
- 52740 PROXIMITY KEYRING FERMAX MIFARE**
- 9538 MEET PC DESKTOP PROXIMITY READER**
- 9540 MEET MANAGEMENT SOFTWARE**
- 9545 MEET LIFT CONTROL GATEWAY**
- 1616 10 RELAY MODULE**
- 1490 EXTERNAL DOORLOCK RELAY**  
It allows the simultaneous activation of a second relay in parallel to the panel or as a secondary relay on 1W panels.
- 1491 4 RELAY PANEL MODULE**  
Only for digital panels.
- 1494 GUEST CODE MODULE**  
Third party access control integration is required.

## 6. POWER SUPPLY AND SWITCHER



ref.4813



ref.1498



ref.1586



ref.1587

## 4813 POWER SUPPLY DIN6 100-240VAC/12VDC-2A

1 PSU per each 4 devices is required. It is recommended that each outdoor panel and GU has its own power supply for installation convenience.

- 1586 4 PoE PORTS SWITCH + 2 UPLINKS PORTS**
- 1587 8 PoE PORTS SWITCH + 2 UPLINKS PORTS**
- 1498 12Vdc PoE SPLITTER**





**FERMAX**





FROM YOUR MOBILE  
YOU CAN PERFORM THE  
FUNCTIONS THAT YOU  
NORMALLY DO FROM  
YOUR HOME'S TERMINAL  
AND MUCH MORE!



Solutions for buildings

5 wires BUS

# TECHNOLOGY: VDS

5 WIRES BUS

A DIGITAL SIMPLIFIED  
INSTALLATION SYSTEM THAT  
DOES NOT USE  
HOUSE CALL WIRES.

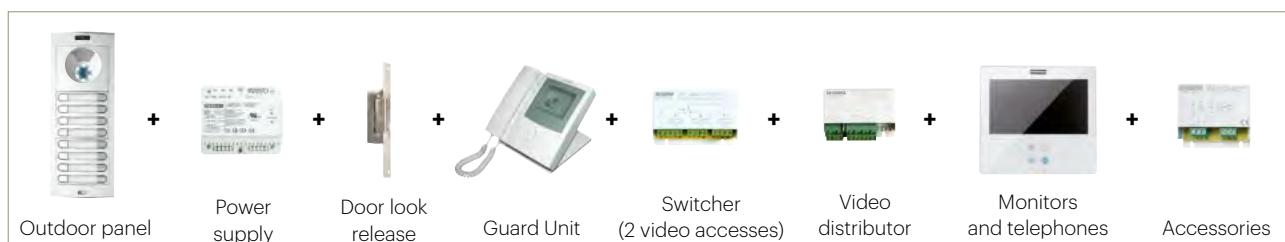
The necessary wiring in the building's riser is:

- Audio entry system: 3 common wires.
- Video entry system:  
3 common wires+1 coaxial / 5 wires /UTP CAT5

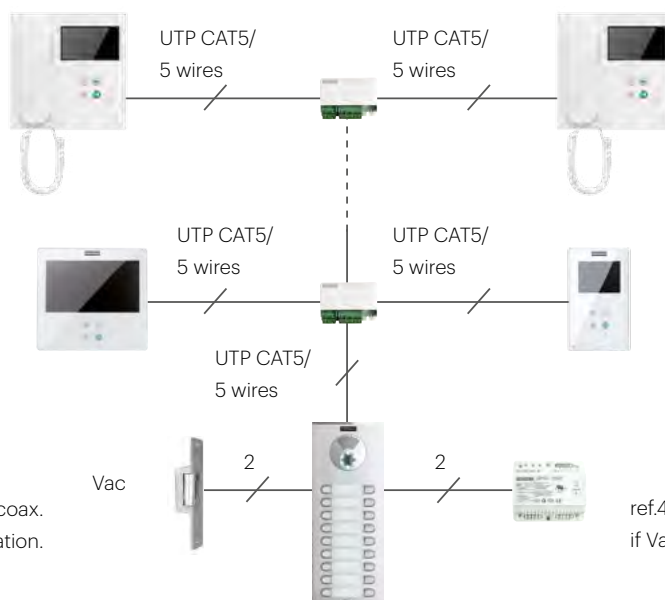
For buildings of up to 199 homes, 2 entry accesses  
and central guard unit. Maximum distance: 200 m.



## COMPOSITION



## VIDEO DIAGRAM



\*It is possible to use 3 wires+coax.  
See specific technical information.

ref.4830 (+ref.4802 only  
if Vac lock release).

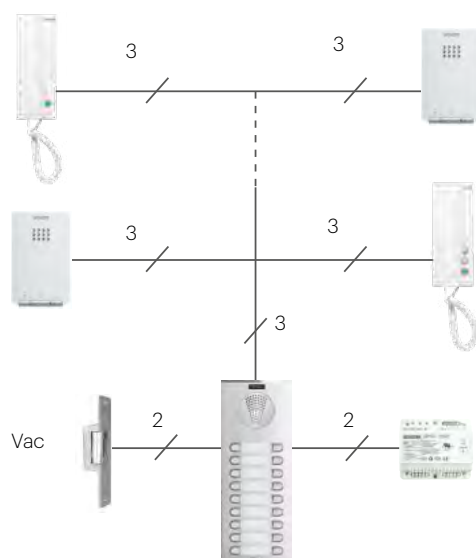




## SYSTEM FEATURES

<b>Wiring</b>	Bus of 5 wires, UTP CAT5 or 3 wires+coax.
<b>Maximum number of apartments</b>	199
<b>Maximum number of outdoor panels</b>	2
<b>Maximum number of guard units</b>	1
<b>Maximum distance</b>	200 m (see technical VDS information).
<b>Private communication outdoor panel-apt.</b>	Yes
<b>Change from a 4+N audio to VDS video</b>	Yes (using the existing wiring).
<b>Monitor address Configuration</b>	Required (addresses 1-199).
<b>Voice synthesiser</b>	Yes. Message: "The door is open. Please, close the door behind you". 32 languages.
<b>Camera</b>	Colour camera.

## AUDIO DIAGRAM



ref.4830 (+ref.4802 only if Vac lock release).

# TECHNOLOGY: VDS

5 WIRES BUS

## 1. OUTDOOR PANEL



### SKYLINE PANEL

SKYLINE manufacturing materials include anodised aluminium profile, chromed zamak push buttons and reinforcements, polycarbonate transparent elements and stainless steel inner grids. For contemporary installations that require multiple integration systems: information, communication and access control.

Includes a **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

Its versatility makes it the only panel able to fulfil any requirements which may arise in any residential, industrial or service sector project. Its modular design and versatility provide **TOTAL CREATIVE FREEDOM** to create any imaginable combination.



The module-frame clip-on assembly system is very simple and effective. The modules fit perfectly into the profile. Watertight tapes prevent water and dirt to get in. Once the panel is assembled, the different modules are connected to each other.

SKYLINE consists of 8 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. **W is twice the size of V.**

## FRAMES



## VIDEO



ref.7421  
Video W

## AUDIO



ref.7415  
Audio W

## DOUBLE PUSH BUTTONS



ref.7371  
8 PUSH. 2x4 W



ref.7372  
4 PUSH. 2x2 V



ref.7376  
2 PUSH. 2x1 V

## SINGLE PUSH BUTTONS



ref.7367  
4 PUSH. 1x4 W



ref.7368  
2 PUSH. 1x2 V



ref.7375  
1 PUSH. 1x1 V

## INFORMATION MODULES



ref.7445  
Panoramic  
cardholder W



ref.7444  
Panoramic  
cardholder V



ref.7448  
OneToOne V



ref.7452  
OneToOne V  
with inductive loop

## ACCESS CONTROL



ref.7438  
Memokey  
keypad W



ref.6936  
Fingerprint W



ref.7440  
Proximity W

## DIGITAL MODULES



ref.7439  
Direct keypad W



ref.7449  
Display W

+



ref.7447  
Digital keypad W

## ACCESSORIES



ref.7443  
Metallic Complement W



ref.7442  
Metallic Complement V

Dimensions: (width) x (height) x (depth) mm.



# TECHNOLOGY: VDS

5 WIRES BUS



## 8829 JOINING BOLTS SET

It allows to combine two or more frames. One set is required for each additional frame installed on flush box.









A cable per each additional frame is required to connect the push button modules between both frames. Dimensions 70cm.

## 2541 DUOX PLUS/VDS CONNECTION CABLE (6W)

## 2542 DUOX PLUS/VDS CONNECTION CABLE (5W)

## SKYLINE AND CITYLINE ACCESSORIES

								
	FLUSH BOX	SURFACE BOX	HOOD		*MODULAR FRAME	CITY FRAME		ANGULAR COMPLEMENT
			SINGLE	DOUBLE		SINGLE	DOUBLE	
S1	ref.8851 115x114x45	ref.7061 130x128x33	ref.8400 135x130	-	ref.9191 211x210	ref.8251 225x310	-	ref.8378
S2	ref.8852 115x138x45	ref.7062 130x151x33	ref.8401 135x155	-	ref.9192 211x234	ref.8252 225x310	-	ref.8379
S3	ref.8853 115x162x45	ref.7063 130x175x33	ref.8402 135x177,5	-	ref.9193 211x257	ref.8253 225x375	-	ref.8380
S4	ref.8854 115x185x45	ref.7064 130x199x33	ref.8403 135x203	ref.8411 265x203	ref.9194 211x281	ref.8254 225x375	ref.8427 355x385	ref.8381
S5	ref.8855 115x233x45	ref.7065 130x246x33	ref.8404 135x250	ref.8412 265x250	ref.9195 211x329	ref.8255 225x375	ref.8428 355x385	ref.8382
S6	ref.8856 115x280x45	ref.7066 130x294x33	ref.8405 135x300	ref.8413 265x300	ref.9196 211x376	ref.8256 225x450	ref.8429 355x460	ref.8383
S7	ref.8857 115x328x45	ref.7067 130x341x33	ref.8406 135x345	ref.8414 265x345	ref.9197 211x424	ref.8257 225x450	ref.8430 355x460	ref.8384
S8	ref.8858 115x375x45	ref.7068 130x389x33	ref.8407 135x393	ref.8415 265x393	ref.9198 211x471	ref.8258 225x450	ref.8431 355x460	ref.8385
S9	ref.8982 115x420,5x45	ref.7069 130x436,5x33	ref.8480 135x440,5	ref.8483 265x440,5	ref.9199 211x519	ref.8259 225x495	ref.8474 355x500	ref.8386

\* To make DOUBLE modular frames, add to the SINGLE frame a DOUBLE PANEL MODULAR FRAME KIT (ref.9200) Horizontal:341mm.

\* To make TRIPLE modular frames, add to the SINGLE frame a TRIPLE PANEL MODULAR FRAME KIT (ref.9201) Horizontal:471mm.

## 1. OUTDOOR PANEL

## CITYLINE PANEL

**CITYLINE** is a monoblock concept panel. It is characterised by its curved profile and distinctive push buttons.

There are **9 different panel dimensions** called "SERIES", all with the same width but different height and push button capacities.

It is manufactured in a **highly weather resistant anodised aluminium profile** (IP43 IK7). The push buttons and displays are chromed zamak, the amplifier frontal in aluminium and the interior is protected by a stainless steel grid.

The watertight push buttons are designed and tested in the most demanding conditions to achieve great durability and reliability.

Includes a **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

## PUSH BUTTON CITYLINE PANELS

1. Select the panel according to the number of apartments. In case that several flush boxes of the same size are combined, it will be necessary to use the Joining Bolts Set (ref.8829).
2. Add call extension modules depending on the number of apartments (ref.2008 up to 8, ref.2441 up to 16).  
NOTE: They are only necessary for 4 buttons or more.
3. Select the flush box or corresponding accessories depending on the series (see accessories table pag 78).

**SERIES 1 // Panel: 130x128** Flush box (ref.8851): 115x114x45

ref.70707  
1 Push.

ref.70007  
2 Push.

ref.70703  
1 Push.

ref.70003  
2 Push.

**SERIES 2 // Panel: 130x151** Flush box (ref.8852): 115x138x45

ref.70717  
2 Push.

ref.70017  
4 Push.

ref.70713  
2 Push.

ref.70013  
4 Push.

**SERIES 3 // Panel: 130x175** Flush box (ref.8853): 115x162x45

ref.70727  
3 Push.

ref.70723  
3 Push.

**SERIES 4 // Panel: 130x199** Flush Box. (ref.8854): 115x185x45

ref.70747  
4 Push.

ref.70743  
4 Push.



ref.8829



ref.2441



ref.2008

- 8829** JOINING BOLTS SET  
**2441** 16 CALL EXTENSION MODULE  
**2008** 8 CALL EXTENSION MODULE

Dimensions: (width) x (height) x (depth) mm.

## DIRECT AND DIGITAL CITYLINE PANELS



ref.7363

ref.7309

Panel dimensions:  
130x246 (S5)

Flush box dimensions:  
115x233x45 (S5)

### DIRECT CITYLINE PANELS

DIRECT panels have a KEYPAD to call the apartments. The keypad admits 1 code to open the door. Adding a DIRECTORY PANEL is recommended.

- 7305** VDS DIRECT VIDEO CITY PANEL S5
- 7308** VDS DIRECT AUDIO CITY PANEL S5
- 7309** DIRECTORY PANEL S5
- 8855** FLUSH BOX S5
- 8829** JOINING BOLTS SET



ref.7299

ref.7310

Panel dimensions: 130x341 (S7)

Flush box dimensions.: 115x328x45 (S7)

### DIGITAL CITYLINE PANELS

DIGITAL panels include keypad and LCD display with 16 characters and 2 rows). The keypad includes access control function (350 codes).

- 7299** VDS DIGITAL VIDEO CITY PANEL S7
- 7310** DIRECTORY CITY PANEL S7
- 8857** FLUSH BOX S7
- 8829** JOINING BOLTS SET

## SPECIAL PANELS

If you cannot find the desired panel, you can make your own SKYLINE panel or ask for SPECIAL CITYLINE panel. You can find "Special frames and panels application forms" at [www.fermax.com/intl/en/pro/online-support/special-panels.html](http://www.fermax.com/intl/en/pro/online-support/special-panels.html)

- 7321** SPECIAL CITYLINE PANEL S1
- 7322** SPECIAL CITYLINE PANEL S2
- 7323** SPECIAL CITYLINE PANEL S3
- 7324** SPECIAL CITYLINE PANEL S4
- 7325** SPECIAL CITYLINE PANEL S5
- 7326** SPECIAL CITYLINE PANEL S6
- 7327** SPECIAL CITYLINE PANEL S7

- 7328** SPECIAL CITYLINE PANEL S8
- 7329** SPECIAL CITYLINE PANEL S9

- 8999** SINGLE SPECIAL CITYLINE FRAME (1 PANEL)
- 89992** DOUBLE SPECIAL CITYLINE FRAME (2 PANELS)
- 89993** TRIPLE SPECIAL CITYLINE FRAME (3 PANELS)

NOTE: special CITYLINE frames are made from aluminium.

## CITYLINE PANEL ACCESSORIES

See ACCESSORIES PAGE 78.

Dimensions: (width) x (height) x (depth) mm.



## CITYLINE PANEL MODULES



ref.7448



ref.7452



ref.7444



ref.7442

PROXIMITY. 400 USERS  
ref.7440ref.23361  
Customizable

ref.4515



ref.5291



ref.5259



ref.5231

## INFORMATION MODULES AND COMPLEMENTS

**7448** ONE TO ONE V MODULE

Device that informs on door entry operating using illuminated pictograms: calling, in conversation, door open or busy channel. Compatible with DUOX PLUS, VDS, MDS and 4+N technologies.

**7452** ONE TO ONE W/IND. LOOP V MODULE

The same as ref.7448 but including inductive loop for people with a hearing impairment. The loop increases the power consumption of the installation, so it is recommended to resize it accordingly. Only compatible with DUOX PLUS and VDS technologies.

**7444** PANORAMIC CARDHOLDER V

Informative card holder with lighting to personalize the building, indicate the address or as a directory of neighbors and necessary door codes on coded digital panels.

**7442** METALLIC COMPLEMENT V

Made of the same material as aluminum panels. It allows to cover gaps in the plate for the installation of future modules.

## ACCESS CONTROL MODULES

For more information see the section "Access Control".

**7440** PROXIMITY READER V

It manages up to 400 cards in stand-alone mode. The keypad (ref.2306) allows to unregister lost identifiers. Power supply 12Vac/dc.

It allows door opening when approaching a proximity card to the module.

**23361** EM PROXIMITY CARD**2336** EM PROXIMITY CARD WITH MAGNETIC BAND**4515** PROXIMITY KEYRING EM**2306** PRIVATE PROGRAMMING KEYPAD

It allows to unregister lost identifiers.

**5291** RF BASIC-MINI RECEIVER

To be installed inside the outdoor panels. Remote opening from remote controller with high security code.

**5259** RF KEYSINGLE-MINI EMITTER**5231** RF KEYSINGLE-PLUS EMITTER 2 PUSH

## 1. OUTDOOR PANEL



### MARINE PANEL

**MARINE** is the FERMAX vandal-proof door entry panel made in AISI 316L stainless steel (2,5mm-thick). IP54 IK09.

Straight lines that highlight the quality of the steel, resistant to even the most corrosive, humid and dangerous environments makes the Marine panel the most suitable and designed option for vandal-resistant installations.

A **synthesized message** - "The door is open. Please, close the door behind you" is emitted while the door is opening. Available in 32 languages.

Includes a **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

To see the general features of MARINE panel, see page 154 in the DUOX PLUS section.

### PUSH BUTTONS MARINE PANELS

1. Select the panel required according to the number of apartments in the building. In case that several flush boxes of the same size are combined, it will be necessary to use the Joining Bolts Set (ref.2289).
2. Always add call extension modules depending on the number of apartments (ref.2008 up to 8, ref.2441 up to 16).
3. Select the flush box or corresponding accessories depending on the series.

#### SERIES ST1 Panel: 150x180

Flush box (ref.4641): 130x160x55



ref.54333  
1 Push.



ref.54343  
2 Push.



ref.54337  
1 Push.



ref.54347  
2 Push.

SURFACE  
BOX  
(with hood)

ref.4645  
154x184x96

HOOD

ref.4701

#### SERIES ST2 Panel: 150x240

Flush box (ref.4642): 130x220x55



ref.54357  
2 Push.



ref.54367  
3 Push.



ref.54377  
4 Push.

SURFACE  
BOX  
(with hood)

ref.4646  
154x244x96

HOOD

ref.4702

FLUSH OR SURFACE BOX must be requested separately. The surface boxes include a hood.

Note: For more MARINE push buttons panels see SPECIAL MARINE PANELS.

## DIGITAL MARINE PANEL

- **DIGITAL MARINE** panel includes a keypad to call the apartments by dialling the door number or the corresponding code.
  - A **DIRECTORY DISPLAY** allows to search for the neighbours and their door number.
  - Once the code is introduced, press the BELL KEY to call.
  - The metallic keys are made of zamak and they are permanently backlit.
  - Throughout the keypad it is possible to open the door by dialling a PIN code.
- There are 350 different users/codes in VDS system.



ref.5468

ref.5471

- 5468** VDS DIGITAL VIDEO MARINE PANEL ST3
- 5471** MARINE ST3 DIRECTORY PANEL
- 4643** MARINE FLUSH BOX ST3
- 4647** MARINE ST3 SURFACE BOX
- 4703** MARINE ST3 HOOD
- 2289** MARINE JOINING BOLTS SET FOR FLUSH BOX

### SERIES ST3 Panel: 150x360

Flush box (ref.4643): 130x340x55

SURFACE  
BOX  
(with hood)

ref.4647  
154x364x96

HOOD

ref.4703



ref.2289



ref.2441



ref.2008

- 2289** MARINE JOINING BOLTS SET FOR FLUSH BOXES
- 2441** 16 CALL EXTENSION MODULES
- 2008** 8 CALL EXTENSION MODULES



# TECHNOLOGY: VDS

5 WIRES BUS



## MARINE ELITE PANEL

FERMAX has a laser-cut machining line for stainless steel panels. This process allows us to offer complete flexibility when it comes to make the MARINE panel required with optimal delivery time for the customised panel.



RAL 9005

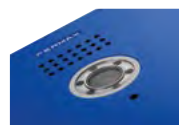


The MARINE Elite panels are available in several colours: indicate the desired RAL when ordering your panel.

RAL 3020



RAL 5005



RAL 9018



RAL 9016



Check for availability in other colours.

## MANUFACTURING PROCESS OF MARINE PANELS



**MARINE ELITE. UNIQUELY FERMAX. SPECIALLY MADE FOR YOU!**



### 3172 SPECIAL MARINE PANEL

The following variations may be ordered:

- Panel with special formats and dimensions.
- Integration of access control modules and special combinations.
- Logotype laser marking. The engraving of panels is only available on the panels with stainless steel colour. Other colours cannot be engraved.
- Residence/Building number and messages integration.
- Push buttons without card slot and free layout.
- Include backlight.

### 4579 SPECIAL MARINE RAINHOOD FOR FLUSH BOX PANEL

### 4580 SPECIAL MARINE FLUSH BOX

### 4581 SPECIAL MARINE SURFACE BOX (WITH HOOD)

You will find the SPECIAL MARINE application forms at:

[www.fermax.com/intl/en/pro/online-support/special-panels.html](http://www.fermax.com/intl/en/pro/online-support/special-panels.html)

## 2. MONITORS AND TELEPHONES

### MONITORS



**VEO**

VEO. Colour monitors with 4,3" (16:9) screen, manufactured in high impact ABS plastic. The monitor includes: control of brightness, contrast and colour, audio volume, call tone volume, 'Do Not Disturb' function, door bell, adjustment of date and time. The pleasant touch silicone push buttons allow to activate the lock release, the outdoor panel camera or any other additional and configurable function as: activate the second access, courtesy light, etc. Available in white colour. Surface installation.

#### 9401 VDS COLOUR VEO MONITOR

Dimensions: 200x200x23mm. (44 with handset)

#### 9402 VDS VEO MONITOR CONNECTOR



Metallic support to mount the VEO VDS monitor on the wall surface.



ref.9410

### VEO MONITOR ACCESSORIES

#### 9410 VEO MONITOR DESKTOP SUPPORT

Made in AISI 316L stainless steel. Connector ref.9402 is also required.

#### 3389 UNIVERSAL LARGE DECORATIVE FRAME. 210x240

Works as an aesthetic complement. Very useful for refurbishment or replacement of old equipment.



ref.3389



#### 3443 VEO HANDSET WITH INDUCTIVE LOOP

Dimensions: (width) x (height) x (depth) mm.





Dimensions: 185x172x21mm



Dimensions: 103x172x21mm

## smile

**SMILE.** Hands-free monitor with 7" or 3,5" TFT colour screen (depending on model). Frontal of high resistance to scratches and UV protection. Digital audio quality. Configuration of parameters from the on screen OSD menu.

**6545** 3,5" SMILE MONITOR

**6550** 7" SMILE MONITOR

**6565** VDS SMILE MONITOR CONNECTOR



Dimensions: 185x172x21mm

## smile TOUCH

The **7" SMILE TOUCH** model includes a capacitive touchscreen. It can be installed on surface or flush mounted. All the models include, among others, adjustment of call volume, 'Do Not Disturb' function, selection of melodies (5), door bell, programming of the monitor address from the monitor itself, control of audio volume, adjustment of image, auxiliary video input (CCTV camera connection), personalisation of direct access buttons to different functions and inductive loop (depending on model).

**6575** 7" SMILE TOUCH MONITOR



ref.6565



ref.6566

## SMILE MONITOR ACCESSORIES

Connector needed for surface mounted.

**6566** SMILE MONITOR DESKTOP SUPPORT  
A connector is required and must be ordered separately.

**6565** VDS SMILE MONITOR CONNECTOR

**3388** UNIVERSAL DECORATIVE FRAME. 120x240

**3389** UNIVERSAL LARGE DECORATIVE FRAME. 210x240



ref.3388



ref.3389

## TELEPHONES

**LOFT** and **iLOFT** telephones include the following features:

- Door opener button and call to guard.
- Door bell.

Additionally, the **LOFT EXTRA** and **iLOFT** telephones include:

- 2 buttons for additional functions: stair light switching, second door opening, panic call, etc.
- LOFT EXTRA with 2 selectable ring tones and iLOFT with 5 selectable ring tones.
- Volume control.



**LOFT:** Made of high-impact ABS with a texturised finish for easy cleaning and ultraviolet protection. It has many attachment points for wall mounting, as well a coiled cord with telephone plug connectors. A magnet located in the handset facilitates to hang it up correctly. Dimensions: 85x220x40mm

**3390** VDS LOFT BASIC TELEPHONE

**3391** VDS LOFT EXTRA TELEPHONE



**iLOFT:** Compact and extra slim. Made of ABS. iLOFT telephone allows communication with the outdoor panel in hands-free mode. The audio digital technology ensures a high quality communication free of interferences.

Hands-free. Dimensions: 90x146,5x20mm

**5601** VDS iLOFT TELEPHONE



ref.3749

ref.5636



ref.3380



ref.3388



ref.3389

## TELEPHONE ACCESSORIES

Fermax desktop supports allow a call from the entrance phone to be answered from the office desktop. Made in stainless steel (AISI 316L).

**3749** LOFT TELEPHONE DESKTOP SUPPORT

**5636** iLOFT TELEPHONE DESKTOP SUPPORT

**3380** LOFT TELEPHONE DECORATIVE FRAME. 200X240

**3388** UNIVERSAL DECORATIVE FRAME. 120X240

**3389** UNIVERSAL LARGE DECORATIVE FRAME. 210X240



**3441** LOFT HANDSET WITH INDUCTIVE LOOP

### 3. GUARD UNIT



#### 2536 VDS CITYMAX GUARD UNIT

3 operating modes:

- Day mode: receives calls from any access and apartments.
- Auto mode: calls from the panel are received at the guard unit and apartments.
- Night mode: only calls from guard unit to apartments are allowed.

#### 2492 VDS GUARD UNIT CONNECTION MODULE

For installation with outdoor panel. DIN10 format.

### 4. VIDEO DISTRIBUTORS



ref.2448



ref.3260

It is recommended to carry out all video signal distribution by means of distributors.

#### 2448 2 WAYS VIDEO DISTRIBUTOR

#### 2449 4 WAYS VIDEO DISTRIBUTOR

Compact sized distributor (44x44x16) designed to be fitted in appliance cabinets and 50mm standard junction boxes. Recommended in installations without coax cable.

#### 3260 2 WAYS VIDEO MINI DISTRIBUTOR

#### 3262 4 WAYS VIDEO MINI DISTRIBUTOR

### 5. SWITCHER / DECODER



ref.2450

#### 2450 VDS VIDEO SWITCHER1

For installations with 2 video accesses (without guard unit).

#### 3265 VDS TESTER

For programming and checking the works in a faster, more convenient and efficient way.

	I. B.Audio VDS	I. B.Video VDS
<b>G. E. MDS Audio</b>	2409 VDS Decoder	2409 VDS Decoder
<b>G. E. MDS Video</b>	2409 VDS Decoder 2448 Video Distributor	2409 VDS Decoder 2448 Video Distributor 2450 Switcher

#### COMBINATION WITH OTHER SYSTEMS

For condominiums where a VDS system is combined in apartment internal blocks (I.B.) with an MDS system at general entrances (G.E.). 1 decoder is required per apartment block. At video installation, one distributor (ref.2448) and/or a switcher (ref.2450) is required.

#### 2409 VDS/MDS DECODER



## 6. POWER SUPPLY



ref.4830

**4830** POWER SUPPLY 18Vdc/3,5 A DIN6.

1 P.S. = max. 40 monitors.



ref.4812

**4812** POWER SUPPLY DIN6 100-240Vac/18Vdc-1,5A

1 P.S. = max. 24 monitors.



ref.4810

**4810** POWER SUPPLY 18Vcc/1,5A-12Vca/1,5A DIN10.

1 P.S. = max. 24 monitors

12Vac output to supply 12Vac locks.



ref.4802



ref.4800

**4802** POWER SUPPLY DIN4 230VAC 12VAC/1A

To supply 12Vac locks.

**4800** POWER SUPPLY DIN4 230VAC 12VAC/1A

To supply 12Vac locks.



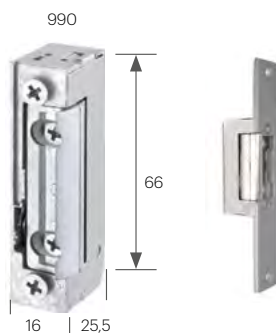
ref.1021

**1021** EMERGENCY MODULE 18Vdc

For operation in the event of power cuts. Requires 2 lead acid batteries 12V/2,2A (ref.2070).

**2070** BATTERY 12V/2,2A

## 7. LOCK RELEASE



### UNIVERSAL LOCK RELEASE

**67501** UNIV. LOCK RELEASE 990N-P22 MAX 10-24Vac/dc

Normal operation and short shield P22. 10-24Vac/dc.

### UNIVERSAL ELECTRIC STRIKE

**6750** UNIV. ELECTRIC STRIKE 990N MAX 10-24Vdc/ac

Normal operation 10-24Vac/dc. Requires a short shield (S ref.2973 or P22 ref.2894) or large (M ref.2893 or L22 ref.2892).

**6752** UNIV. ELECTRIC STRIKE 990A MAX 12-24Vdc/dc

Automatic operation 12-24Vac/dc. Requires short shield (S ref.2973 or P22 ref.2894) or large (M ref.2893 or L22 ref.2892).

#### 990 Series consumption

N.A	12Vac	250mA
	12Vdc	250mA

Dimensions: (width) x (height) x (depth) mm..

## 8. ACCESSORIES



FROM YOUR MOBILE YOU CAN  
PERFORM THE FUNCTIONS THAT YOU  
NORMALLY DO FROM YOUR HOME'S  
TERMINAL AND MUCH MORE!



ref.3266

**3266** WI-BOX MODULE

Wi-Box is a small module that allows you to connect one or more mobile phones to your home's VDS monitor or telephone. Just download the App and pair Wi-Box with your WiFi network.  
Dimensions: 80x80x20mm

## ADVANTAGES

**SECURITY**

You can **receive calls** even if you're not at home.

**COMFORT**

You can **open the door** to your visitors from the comfort of your sofa.

**MORE PEACE OF MIND**

You'll be able to **connect to the outdoor panel** without calling ahead of time. Or activate an extra camera from your holiday destination.

**MORE MOBILITY**

You can open the door with your mobile phone.  
No need to carry your keys.





ref.4545

## 4545 TELEPHONE INTERFACE

Installed in the home and connected to the telephone network, it allows for the communication (only audio) with the outdoor panel as well as opening the door remotely from any conventional or wireless telephone at home. It allows as well to forward the call to one or two external land lines or mobile telephones. Every telephone interface requires one power supply unit ref.4800. It is not recommended for telephone installations with fiber optics.

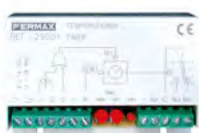
## ADDITIONAL FUNCTIONS



ref.2013

## 2013 ADDITIONAL FUNCTIONS RELAY

Allows for the remote activation of electrical devices using an additional button on the telephone or monitor: switch on the stair light, open the garage, open a 2nd door, etc. Activation by 12Vdc, 12Vac or 18Vdc.

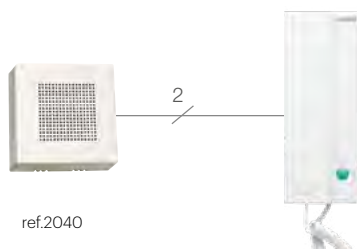


ref.29001

## 88101 DOUBLE CONTACT RELAY 18Vdc

## 29001 TIMER

Allows for the activation of a device for a given time (programmable from 0 to 6 minutes or 0 to 60 seconds). The activation can be automatic when a call is received or by means of a specific button on the telephone or monitor.



ref.2040

## CALL ACCESSORIES

## 2040 ELECTRONIC CALL EXTENSION BELL

Equipment that receives the door entry system call tone, allowing it to be heard in any place where the call extender is located. It is possible to connect 1 per monitor or handset.



ref.2438

## 2438 LIGHT OR BUZZER ACTIVATOR

Allows for the activation of high powered devices or indicators when a call is received: bells, sirens, light bulbs, etc. It is possible to connect 1 per monitor or handset.





ref.2450



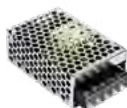
ref.2472



ref.9981



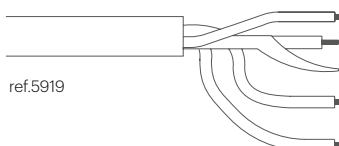
ref.9980



ref.9982



ref.9983



ref.5919

## VIDEO ACCESSORIES

It is possible to expand video door entry installations with a 2nd external CCTV camera and select and view it from the monitor (expandable up to 8 cameras).

### 2450 VDS VIDEO SWITCHER

Necessary in VDS video door entry system with 2 video panels.

### 2472 8 CAMERAS SELECTOR

Allows to control up to 8 cameras from the monitor (using F1 and F2).

### 4614 2nd CAMERA SELECTOR

To select a 2nd camera by means of 

### 4110 VIDEO SIGNAL AMPLIFIER

To regenerate the video signal of the coaxial.

### 9980 PERIPHERAL CCTV DOME CAMERA

### 9981 PERIPHERAL CCTV BULLET CAMERA

### 9982 POWER SUPPLY PERIPHERAL CCTV CAMERA

### 9983 BALUNS PAIR PERIPHERAL CCTV CAMERA

### 9984 POWER ADAPTOR PERIPHERAL CCTV CAMERA

## CABLES

All cables are supplied in 100 metres rolls.

### 5919 VIDEO BUS CABLE. 100M

3 wires of 1mm<sup>2</sup> + 1 coax 75 Ohms.



# MDS

**FERMAX**





**Solutions for buildings**



# TECHNOLOGY: MDS

MDS (MULTIPLEXED DIGITAL SYSTEM) IS AN AUDIO AND VIDEO DOOR ENTRY OF MAXIMUM PERFORMANCE AND GREAT CAPACITIES, OFFERING TOTAL PRIVACY DURING THE CONVERSATIONS.



It is a simplified installation system by MDS BUS. It allows to interconnect general entrances, interior blocks and access control readers.

- **MDS AUDIO BUS:** 4 common wires + 1 common shielded twisted pair.
- **MDS VIDEO BUS:** 6 common wires + 1 common shielded twisted pair + 1 video coaxial cable.

## MDS CLASSIFICATION SYSTEMS

The MDS system can be divided into 2 main groups:

- MDS DIRECT/CITY.
- MDS DIGITAL.

## COMBINATION WITH OTHER SYSTEMS

The MDS system can be combined with both 4+N and VDS indoor terminals. Because of that, the MDS system is mainly used to expand the capacities of a VDS system. With the MDS/VDS decoder (ref. 2409), you can get maximum advantage of each system and wiring simplicity. For full details, see MDS/VDS section.



## MDS DIRECT/CITY

It does not require Central Unit (ref. 2405) because both outdoor panels and guard unit are directly connected to the MDS bus. It allows only one guard unit (ref. 2532) per installation. It is optimal as a VDS complement, for those cases which require:

Longer distances
Greater number of outdoor panels
Greater number of apartments
Urbanisations with general entrances (MDS) and interior blocks (VDS)
Intercommunication between apartments through the guard unit (only with 4+N indoor terminals)
Radio communication from 1 /W 4+N audio panels to a guard unit (MDS DIRECT allows to install up to 999 1 way 4+N audio panels connected to the bus through the panels decoders ref. 2436).
Intercommunication in the apartment itself (only with 4+N Palace indoor terminals)

The capacities of this system can vary slightly depending on the panel type (push buttons or keypad without display).

### MDS CITY PANEL

Push buttons panels to access interior blocks (they cannot be installed as general entrances). It can be combined with MDS DIRECT in the general entrances.

Capacity:

**- INTERIOR BLOCK:**

- 99 apartments and 9 accesses.

**- SINGLE BLOCK:**

- 99 apartments, 5 accesses and 1 guard unit.
- 99 apartments and 9 accesses.



SKYLINE



CITYLINE

### MDS DIRECT PANEL

The panels include KEYPAD (without display) that serves to call the apartments and dial a code to opening the door (1 common code for all the users). It is recommended to add a DIRECTORY panel to show the list of residents.

Capacity:

**- CONDOMINIUM or URBANISATION:**

- General entrance: 9,999 apartments, 5 accesses and 1 guard unit.
- Interior block: 99 apartments and 9 accesses per block (up to 99 blocks).

**- SINGLE BLOCK:**

- 99 apartments, 5 accesses and 1 guard unit.
- 99 apartments and 9 accesses.



ref.7287



ref.7318



ref.7286

## MDS DIGITAL

It requires one or several Central Units (ref. 2405) to connect outdoor panels, guard units and access control readers to the MDS bus (Outdoor panels use to include keypad + display), MDS DIGITAL will be used whenever MDS DIRECT/CITY is not enough, because it offers many other functionalities, allowing the complete management of big condominiums.

Access control (proximity, fingerprint, keypad, etc.) integrated in the video door entry MDS bus itself.

Centralised access control managed from the video door entry software itself.

Programmed automation through relays decoders (up to 999 addresses) and sensors (up to 999 addresses) in order to activate lights, sensors, irrigation, etc.

Lift control. Different lift control modes to restrict access to non-authorised floors.

Management via local and remote PC (via the IP remote management module ref. 1087). It connects to the network (Ethernet) without requiring any additional cable.

All of this with:

- More panels
- More apartments
- More guard units (including differentiated call to several guard units, both from 2 push buttons panels as well as monitors/telephones).



SKYLINE



URBANLINE



CITYLINE



MARINE

## 1. OUTDOOR PANEL



### SKYLINE PANEL

SKYLINE manufacturing materials include anodised aluminium profile, chromed zamak push buttons and reinforcements, polycarbonate transparent elements and stainless steel inner grids.

For contemporary installations that require multiple integration systems: information, communication and access control.

Includes a **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

Its versatility makes it the only panel able to fulfil any requirements which may arise in any residential, industrial or service sector project. Its modular design and versatility provide **TOTAL CREATIVE FREEDOM** to create any imaginable combination.

SKYLINE consists of **8 DIFFERENT-SIZED FRAMES** where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. **W is twice the size of V.**



The module-frame clip-on assembly system is very simple and effective. The modules fit perfectly into the profile. Watertight tapes prevent water and dirt to get in. Once the panel is assembled, the different modules are connected to each other.

Dimensions: (width) x (height) x (depth) mm.



SKYLINE consists of 8 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. W modules is twice the size of V.

## FRAMES



## VIDEO AND AUDIO MODULES W



ref.7406  
Video W



ref.7400  
Audio W

## DOUBLE PUSH BUTTONS



ref.7371  
8 PUSH. 2x4 W



ref.7372  
4 PUSH. 2x2 V



ref.7376  
2 PUSH. 2x1 V

## INFORMATION MODULES



ref.7445  
Panoramic  
cardholder W



ref.7444  
Panoramic  
cardholder V



ref.7448  
OneToOne V

## SINGLE PUSH BUTTONS



ref.7367  
4 PUSH. 1x4 W



ref.7368  
2 PUSH. 1x2 Vd



ref.7375  
1 PUSH. 1x1 V

## ACCESS CONTROL



ref.6936  
Fingerprint W



ref.7440  
Proximity V

## DIGITISER MODULE AND CALL KEYPAD



ref.7460  
Digitiser Module



ref.7439  
Direct Keypad W  
(panel without display)

## METALLIC MODULES



ref.7443  
Metallic  
complement W



ref.7442  
Metallic  
complement V

## SKYLINE PANEL ACCESSORIES

If the configuration calls for more than one panel, a connection cable ref.2541 between them is needed (1 cable per additional panel). They can be joined laterally within the same series by means of a joining bolts set (ref.8829). Select the corresponding flush box. In case of any additional accessory required, see the CITYLINE/SKYLINE accessories table on page 78.

## 1. OUTDOOR PANEL



### CITYLINE PANEL

CITYLINE is a monoblock concept panel. It is characterised by its curved profile and distinctive push buttons.

There are 9 different panel dimensions called "SERIES", all with the same width but different height and push button capacities.

It is manufactured in a highly weather resistant anodised aluminium profile (IP43 IK7). The push buttons and displays are chromed zamak, the amplifier frontal in aluminium and the interior is protected by a stainless steel grid.

The watertight push buttons are designed and tested in the most demanding conditions to achieve great durability and reliability.

Includes a wide angle **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

### MDS DIRECT



ref.7287



ref.7318



ref.7286

- 7287** MDS DIRECT VIDEO CITY PANEL S6
- 7286** MDS DIRECT AUDIO CITY PANEL S6
- 7318** DIRECTORY CITY PANEL S6

### ACCESSORIES

- 8856** FLUSH BOX S6
- 7066** SURFACE BOX S6
- 8829** JOINING BOLTS SET

### MDS CITY



In order to mount a Cityline MDS CITY panel, it is required:

- The corresponding 4+N Cityline panel (with COMPLETE amplifier, see page 106) that has a viewer to place the MDS digitiser.
- 7460 MDS SKYLINE V digitiser
- Call extension packs ref. 2008 (8 apart.) or ref.2441 (16 apart.).

NOTE: For the programming, implementation and maintenance of an installation with more than 1 MDS CITY panel, a DIRECT keypad ref.7439 will be necessary.



ref.2532

### 2532 CITYMAX GUARD UNIT MDS DIRECT/CITY

Desktop support included. Surface installation. The MDS DIRECT/CITY system allows the connection to 1 Guard Unit.



ref.2443

### 2443 MDS DIRECT/CITY 1 ACCESS SWITCHER

One is required per additional video panel.

A **MDS DIGITAL** system at general entrances combined with VDS system at interior blocks is composed by:

## MDS DIGITAL



MDS Digital SKYLINE



Panel dimensions S7: 130x341  
Flush box dimensions S7: 115x328x45



Panel dimensions ST3: 150x360  
Flush box dimensions ST3: 130x340x55



ref.7482

ref.7481

Panel with KEYPAD + ELECTRONIC DIRECTORY. A Central Unit is required.

### SKYLINE

It allows for the creation of any MDS DIGITAL panel combination with other access control or informative accessories: cardholder, proximity, fingerprint, OneToOne, etc. 4+N amplifier is required.

### CITYLINE

**7297** MDS COLOUR DIGITAL VIDEO CITY PANEL S7

**7301** MDS DIGITAL AUDIO CITY PANEL S7

**7310** DIRECTORY CITY PANEL S7

### SKYLINE AND CITYLINE ACCESSORIES

**8857** FLUSH BOX S7

**7067** SURFACE BOX S7

**8257** DECORATIVE FRAME S7

**8829** JOINING BOLTS SET

**8406** CITY SINGLE HOOD S7

**8414** CITY DOUBLE HOOD S7

### MARINE

**5470** MDS DIGITAL VIDEO PANEL ST3

**5467** MDS DIGITAL AUDIO PANEL ST3

**5471** MARINE ST3 DIRECTORY PANEL

### ACCESSORIES

**4643** MARINE FLUSH BOX ST3

**4647** MARINE ST3 SURFACE BOX

**2289** MARINE JOINING BOLTS SET FOR FLUSH BOX

**4703** MARINE ST3 HOOD

### URBANLINE

**7482** URBANLINE VIDEO PANEL S7

**7481** URBANLINE AUDIO PANEL S7

### ACCESSORIES

**8857** FLUSH BOX S7

Dimensions: (width) x (height) x (depth) mm.



SKYLINE consists of 8 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. W modules is twice the size of V.

## FRAMES



**ref.7341**  
1V Series 1  
130x128

**ref.7332**  
2V Series 2  
130x151

**ref.7333**  
3V Series 4  
130x199

**ref.7334**  
4V Series 5  
130x246

**ref.7335**  
5V Series 6  
130x294

**ref.7336**  
6V Series 7  
130x341

**ref.7337**  
7V Series 8  
130x389

**ref.7338**  
8V Series 9  
130x436,5

## VIDEO AND AUDIO MODULES W



**ref.7406**  
Video W

**ref.7400**  
Audio W

## INFORMATIVE MODULES



**ref.7445**  
Panoramic  
cardholder W

**ref.7444**  
Panoramic  
cardholder V

**ref.7448**  
OneToOne V

## METALLIC MODULES



**ref.7443**  
Metallic  
complement W

**ref.7442**  
Metallic  
complement V

## ACCESS CONTROL



**ref.6936**  
Fingerprint W

**ref.7440**  
Proximity V

## DIGITISER MODULE AND CALL KEYPAD



**ref.7460**  
Digitiser Module

**ref.7439**  
Direct Keypad W  
(panel without display)

## ELECTRONIC DISPLAYS AND CALL KEYPAD MODULES



**ref.7451**  
MDS Display W

**ref.7447**  
MDS Digital Keypad W  
(panel with display)

## SKYLINE PANEL ACCESSORIES

If the configuration calls for more than one panel, a connection cable ref.2541 between them is needed (1 cable for each additional panel). The flush boxes can be joined laterally within the same SERIES by means of a joining bolts set (ref.8829). Select the corresponding flush box. In case of any additional accessory was needed, consult CITYLINE/ SKYLINE accessory table on page 78.

## 1. OUTDOOR PANEL

### CITYLINE PANEL

CITYLINE is a monoblock concept panel. It is characterised by its curved profile and distinctive push buttons.

There are 9 different panel dimensions called "SERIES", all with the same width but different height and push button capacities.

Manufactured in a highly weather resistant anodized aluminium profile (IP43 IK7). The push buttons and displays are chromed zamak, the amplifier façade in aluminium and the interior protected by a stainless steel grid.

Push buttons are watertight designed and tested in the most demanding conditions to achieve great durability and reliability.

**COLOUR CAMERA** as standard. It includes LEDS for low lighting situations.



ref.70706  
1 PUSH.



ref.70701  
1 PUSH.

#### PUSH BUTTON CITYLINE PANELS

By means of the panels decoders (ref.2436), it is possible to call the General Concierge Units from restricted areas (swimming pool, gym, garages, social areas, etc.) or from inside the lifts.

SERIES 1 // Panel: 130x128 Flush box (ref.8851): 115x114x45



ref.7299



ref.7310

#### DIGITAL CITYLINE PANEL

DIGITAL panels include a KEYPAD and 16-character LCD x 2 rows DISPLAY. The keypad incorporates an access control function (350 codes).

**7299** VDS DIGITAL VIDEO CITY PANEL S7

**7303** VDS DIGITAL AUDIO CITY PANEL S7

**7310** DIRECTORY CITY PANEL S7

**8857** FLUSH BOX S7

Panel: 130x341 (S7)  
Flush box: 115x328x45 (S7)

NOTE: For other CITYLINE push button panels see SPECIAL CITYLINE PANELS on page 80.

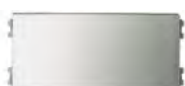
Dimensions: (width) x (height) x (depth) mm.



ref.7448



ref.7444



ref.7442

## INFORMATIVE MODULES AND COMPLEMENTS

### 7448 ONE-TO-ONE MODULE V

Device that informs on door entry operating using illuminated pictograms: Calling, in conversation, door open or busy channel. It facilitates visual information for people with hearing impairment.

### 7444 PANORAMIC CARDHOLDER V PANORAMIC CARDHOLDER V

Informative cardholder with lighting to personalise the building. It indicates the address or use as a resident and door codes directory needed in codified digital panels.

### 7442 SKYLINE METALLIC COMPLEMENT V

Made of the same material as the aluminium panels. It allows to cover gaps in the panel for future module installations.



PROXIMITY  
400 USERS  
ref.7440

ref.23361

ref.4515



ref.5291

ref.5259

ref.5231

## ACCESS CONTROL MODULES

### 7440 SKYLINE PROXIMITY READER V

It allows to opening the door when approaching a proximity card or keyring. It manages up to 400 identifiers in Stand-alone mode. It allows a programming keyboard (ref. 2306) to delete lost identifiers. Power supply 12Vac/cc. It allows door opening when approaching a proximity card to the module.

### 23361 EM FERMAX PROXIMITY CARD

### 2336 EM PROXIMITY CARD WITH MAGNETIC BAND

### 4515 PROXIMITY KEYRING

### 2306 PRIVATE PROGRAMMING KEYPAD

It allows to delete lost identifiers.

### 5291 RF BASIC-MINI RECEIVER

To be installed in the panels interior. Remote opening from a remote control with high secured code.

### 5259 RF KEYSINGLE-MINI EMITTER

### 5231 RF KEYSINGLE-PLUS EMITTER 2 PUSH

## CITYLINE/SKYLINE ACCESSORIES

								
	FLUSH BOX	SURFACE BOX	HOOD		MODULAR Frame*	CITY Frame		ANGULAR COMPLEMENT
			SIMPLE	DOUBLE		SIMPLE	DOUBLE	
<b>S1</b>	ref.8851 115x114x45	ref.7061 130x128x33	ref.8400 135x130	-	ref.9191 211x210	ref.8251 225x310	-	ref.8378
<b>S7</b>	ref.8857 115x328x45	ref.7067 130x341x33	ref.8406 135x345	ref.8414 265x345	ref.9197 211x424	ref.8257 225x450	ref.8430 355x460	ref.8384
<b>S8</b>	ref.8858 115x375x45	ref.7068 130x389x33	ref.8407 135x393	ref.8415 265x393	ref.9198 211x471	ref.8258 225x450	ref.8431 355x460	ref.8385
<b>S9</b>	ref.8982 115x420,5x45	ref.7069 130x436,5x33	ref.8480 135x440,5	ref.8483 265x440,5	ref.9199 211x519	ref.8259 225x495	ref.8474 355x500	ref.8386

\* To make DOUBLE modular frames, add to the SINGLE frame a DOUBLE PANEL MODULAR FRAME KIT ref.9200 H:341mm.

\* To make TRIPLE modular frames, add to the SINGLE frame a TRIPLE PANEL MODULAR FRAME KIT ref.9201 H:471mm.

Dimensions: (width) x (height) x (depth) mm.



## 1. OUTDOOR PANEL



Ask for availability

### URBANLINE PANEL

Fermax MDS DIGITAL technology. User-friendly. Panel that integrates 2 x capacitive touchscreens (size 3,5", format 4:3):

- Upper screen: message display.

- Lower screen: keypad.

EM Proximity reader included and empty slot for a HID third party reader.

Wide angle camera 1MP (SXGA, 1312X740; only in the video panel ref. 7482) H: 130°, V: 80°.

Leds for lighting dark scenes.

Presence detector to turn on the screens.

Flush mounted (box size S7: 115 x 328 x 45 mm).

Hidden fixing system. Invisible screws.

Access code by keypad.

Date and time display on the upper screen. Users search by Agenda.

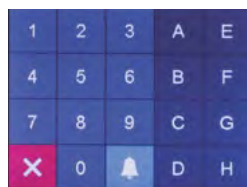
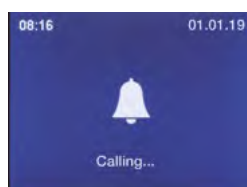
Door opening voice message.

**7481** URBANLINE AUDIO PANEL S7

**7482** URBANLINE VIDEO PANEL S7

**8857** FLUSH BOX S7

## FUNCTIONS



The outdoor panel has a Local Menu that is managed by the outdoor panel itself. This local menu includes an option (8) to configure the MDS Central Unit Menu. The features included in the Local Menu are as follows:

1. Panel Configuration. To configure the outdoor panel address (00-31, default 00) and the Multi-stair option (default value 'off').
2. Door opening time. To adjust the door opening time (00-99 s.). By default 03 s.
3. Codes. In this submenu, the access code to the local menu can be modified or a proximity master card can be added in master mode.
4. Screen adjustments. To modify the screens' brightness (from 1 to 9, default 5) and the type of activation (1-Touch or Sensor (by default) or 2-Always ON).
5. Language. To configure the language in the Local Menu of the panel (14 languages, default Spanish). This language can be different from the one configured in the MDS Central Unit.
6. Restricted calls. This submenu is used to add and delete users who have allowed permission to receive calls from the outdoor panel. This option must be previously enabled (Option deactivated by default). In this submenu it is also possible to define the number of digits stored for each user in the allowed calls list (by default 4 digits).
7. Reader. This submenu is used to enable/disable the EM integrated proximity reader that is in the panel (by default Activated).
8. Central Unit Programming. This option gives access to the MDS Central Unit Menu with all the standard MDS Digital menus.
9. Guest code. Enables/Disables the guest code option. If Option-9-Guest code is disabled, the connector CN5 works as a Wiegand-26 data input. If Option-9-Guest code is enabled (default option), the connector CN5 works as a Wiegand-26 data output to interact with a third party controller (the controller must have its own power supply unit).
10. Alpha numeric call. Enables/Disables the alphanumeric call (disabled by default) and allows selection of alphanumeric calls range (from A to H).
11. Message configuration. This submenu allows to edit and modify the messages received from the MDS central unit in order to customize the text messages to be shown on the display.
12. Reset. In this submenu it is possible to reset the local parameters or reset the restricted calls users list.

## 1. OUTDOOR PANEL



### MARINE PANEL

MARINE is the FERMAX vandal-proof door entry panel made in AISI 316L stainless steel (2,5mm-thick). IP54 IK09.

Straight lines that highlight the quality of the steel, resistant to even the most corrosive, humid and dangerous environments makes the Marine panel the most suitable and designed option for vandal-resistant installations.

A synthesized message - "The door is open. Please, close the door behind you" is emitted while the door is opening. Available in 32 languages.

Includes a **COLOUR CAMERA** and additional night vision lighting with 6 LEDs.

### INFORMATIVE MODULES AND COMPLEMENTS

By means of the panels decoders (ref.2436), it is possible to call the General Concierge Units from restricted areas (swimming pool, gym, garages, social areas, etc.) or from inside the lifts.

Both FLUSH or SURFACE boxes must be requested separately. Surface boxes include hood.

#### SERIES ST1 Panel: 150x180 Flush box(ref.4641): 130x160x55



ref.54331  
1 Push.



ref.54336  
1 Push.

SURFACE BOX (with hood) ref.4645  
154x184x96

HOOD ref.4701

### DIGITAL MARINE PANEL



ref.5468

ref.5471

- The **MARINE DIGITAL** panel includes a keypad to call the apartments by dialling the door number or the corresponding code.
- A **DIRECTORY DISPLAY** allows to search for the neighbours and their door number. Includes a numeric keypad, simple and intuitive to use.
- Once the code is introduced, press the BELL KEY to call.
- The metallic keys are made of zamak.
- BACKLIGHT allowing to see the numbers in poor light conditions.
- Through the keypad it is possible to activate the installation's electric lock. The management of codes/users numbers is 1.020 codes in MDS DIGITAL with Central Unit ref. 2405.

**5468** VDS DIGITAL VIDEO MARINE PANEL ST3

**5471** MARINE ST3 DIRECTORY PANEL

**4643** MARINE FLUSH BOX ST3

**4647** MARINE ST3 SURFACE BOX

**4703** MARINE ST3 HOOD

**2289** MARINE JOINING BOLTS SET FOR FLUSH BOX

#### SERIES ST3 Panel: 150x360 Flush box (ref.4643): 130x340x55

SURFACE BOX (with hood)

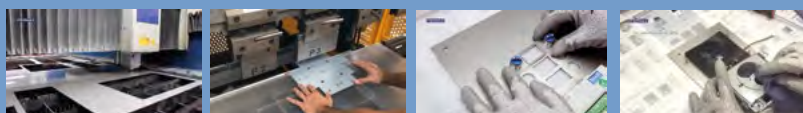
ref.4647  
154x364x96

HOOD ref.4703

Dimensions: (width) x (height) x (depth) mm.



Manufacturing process of MARINE panels.



## MARINE ELITE PANEL

FERMAX has a laser-cut machining line for stainless steel panels. This process allows us to offer complete flexibility when it comes to make the Marine panel required, with optimal delivery time for the customised panel.



RAL 9005

### 3172 SPECIAL MARINE PANEL

The following variations may be ordered:

- Panel with special formats and dimensions.
- Integration of access control modules and special combinations.
- Logotype laser marking. The engraving of panels is only available on the panels with stainless steel colour. Other colours cannot be engraved.
- Residence/Building number and messages integration.
- Push buttons without card slot and free layout.
- Include backlight.

### 4579 SPECIAL MARINE RAINHOOD FOR FLUSH BOX PANEL

### 4580 ESPECIAL MARINE FLUSH BOX

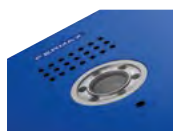
### 4581 ESPECIAL MARINE SURFACE BOX (WITH HOOD)

The MARINE Elite panels are available in several colours: indicate the desired RAL when ordering your panel.

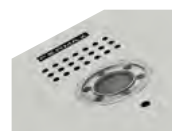
RAL 3020



RAL 5005



RAL 9018



RAL 9016



Check for availability in other colours.



You can find SPECIAL MARINE application forms at:

[www.fermax.com/intl/en/pro/online-support/special-panels.html](http://www.fermax.com/intl/en/pro/online-support/special-panels.html)



## 2. ACCESS CONTROL READERS

Access control readers are considered by the Central Unit as just another access. Every central Unit (ref.2405) allows for the management of up to 1.020 users of access control. The panel is supplied with the corresponding flush box. No switcher is required.



ref.6992



ref.6958



ref.6994

### CITYLINE

Panel S1: 130x128 / Flush box S1 (ref.8948): 115x114x45.

**6992** CITYLINE PROXIMITY READER

**6958** CITYLINE WIEGAND MIFARE/EM PROXIMITY READER

**6994** MDS CITY KEYPAD



ref.5472



ref.4696

### MARINE

Panel ST1: 150x180 / Flush box ST1 (ref.4641): 130x160x55.

**5472** MARINE PROXIMITY READER

**4696** AC+ MARINE KEYPAD



ref.23361



ref.4515



ref.4420

### PROXIMITY IDENTIFIERS

**23361** EM FERMAX PROXIMITY CARD

**2336** EM PROXIMITY CARD WITH MAGNETIC BAND

**4515** PROXIMITY KEYRING

**52750** PROXIMITY CARD MIFARE FERMAX

**52740** PROXIMITY KEYRING FERMAX MIFARE

RF-Wiegand readers, fingerprint readers and resistant readers need a door controller (ref.4420) for each access.

**4420** DOOR CONTROLLER



ref.5296



ref.5293

### RESISTANT

**5296** RESISTANT PROXIMITY READER

**5293** RESISTANT KEYPAD W/PROXIMITY



ref.5266



ref.5259



ref.5231

### RADIOFREQUENCY

**5266** RF-WIEGAND 12VDC RECEIVER

**5259** RF KEYSINGLE-MINI EMITTER

**5231** RF KEYSINGLE-PLUS EMITTER 2 PUSH

**5232** RF KEYSINGLE-PLUS EMITTER 4 PUSH

### FINGERPRINT WITH PROXIMITY

**6935** CITYLINE FINGERPRINT READER

It includes a built-in proximity reader for major security or for independent register of users. Includes display and LEDs indicating the door opening, user's number, if the fingerprint reading is correct or not, configuration and authorisations-cancellations menu management. It includes a remote infrared keypad for programming.



ref.6935



ref.5482

**5482** MARINE FINGERPRINT READER



### 3. GUARD UNIT



ref.2537

#### 2537 MDS DIGITAL GUARD UNIT

Desktop support included. Surface installation. It includes a 4" graphic display that informs of all the events and actions of the installation: origin of call, type of call, call, call waiting, latest communication, etc.

The guard unit has 3 operation modes: day, night and mixed, and in the case of MDS Digital Installations, it can act as a panic reception centre. The guard unit can communicate with any access or home, and can establish communication between any 2 points of the installation (exclusively MDS installation).

### 4. CENTRAL UNIT



ref.2405



ref.2379

Essential at installations with MDS Digital panels.

#### 2405 1 ACCESS MDS CENTRAL UNIT

It manages up to 9.999 apartments and 1.020 access control users.

- In single blocks: manages up to 32 accesses (1 of them can be audio/video). For more audio/video accesses, switcher (ref.2379) every 2 accesses will be required.
- In condominiums: up to 31 accesses per Central Unit if the accesses are audio/video, 2-access switchers ref.2379 will be required. Includes WINCOM PLUS software for PC configuration. Includes memory for incidents record (A.C. applications).

#### 2379 2 ACCESES SWITCHER

It is necessary to connect more than one video panel/guard unit to C.U. Add 1 module for more than 1 additional panel/guard unit.

#### PC CONNECTION ACCESSORIES

##### 24661 USB ADAPTOR TO RS485

Enables Central Unit programming by PC in FXL network. PC Connection by USB.

##### 2466 PC DECODER PROGRAMMING MODULE

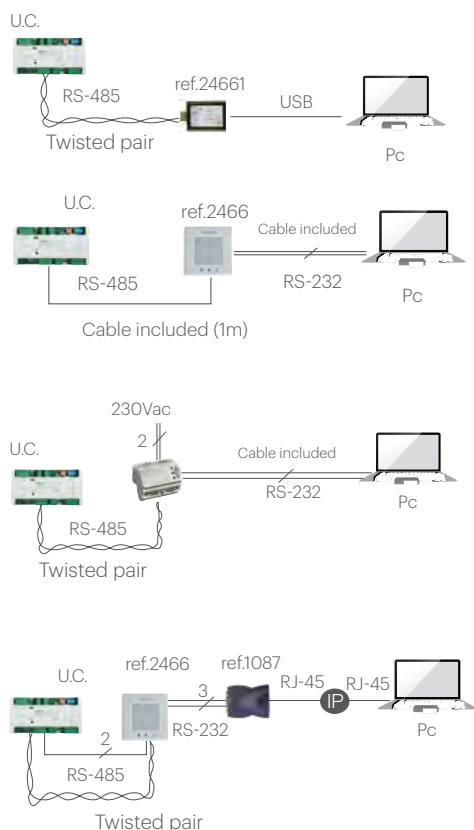
It enables Central Unit programming by PC (serial port).

##### 2338 RS-232 TO RS-485 PC ADAPTOR

It allows Central Unit programming in FXL network. DIN. RS-232 connection to PC. Allows for the connection of 1 modem for remote management by telephone. Maximum distance to Central Unit: 1.200m.

##### 1087 IP REMOTE MANAGEMENT MODULE

It is connected to the Central Unit by means of the adaptor ref.2466. Allows communication between the management computer and the installation using the computer network (Ethernet), avoiding additional wiring.



## 5. POWER SUPPLY



ref.4813



ref.4830



ref.4812



ref.2060

### COMMON ELEMENTS FOR ALL MDS SYSTEMS

#### **4813** POWER SUPPLY DIN6 100-240VAC/12VDC-2A

It requires: 1 unit for each Central Unit and up to 6 accesses; or 1 unit for every 10 VDS decoders or audio decoders, depending on the distance and cable cross-section used. DIN6 format.

#### **4830** POWER SUPPLY 18Vdc/3,5 A DIN6

It requires: 1 unit for each 40 monitors or 1 unit for each 4 monitors per apartment. DIN6 format.

#### **4812** POWER SUPPLY DIN6 100-240VAC/18VDC-1,5A

To increase the number of monitors in homes. Requires: 1 unit for every 2 additional monitors per home. DIN6 format.

For functioning of the power unit if the electricity supply fails, it is necessary to connect it to an adaptor, to which a battery is connected. Compatible with any type of standard lead acid battery.

#### **2060** BATTERY ADAPTOR 12VDC (DIN6)

#### **1021** EMERGENCY MODULE 18Vdc

## 6. DOOR LOCK RELEASE



540

540 SERIES Consumption		
N/A	12Vac	560mA
N-412	12Vdc	250mA



990

990 SERIES Consumption		
N	12Vac	250mA
	12Vdc	250mA

For other models see Lock Release section or current Lock Releases catalogue.

#### **67501** UNIV. LOCK RELEASE 990N-P22 MAX 10-24Vac/dc 10-24 Vac/dc.

#### **6750** UNIV. ELECTRIC STRIKE 990N MAX 10-24Vdc/ac

Normal operation. 12Vdc or 12Vac. Standard issue with adjustable MAX latch bolt. Requires short shield (S ref.2973 or P22 ref.2894) or large (M ref.2893).

#### **30701** LOCK RELEASE 540N-412-S MAX

Normal operation and short shield. 12Vdc.

#### **3264** AC ELECTRIC LOCK COMMANDER

Maximum current: 1 Ampere.



## 7. ACCESSORIES



ref.2339

### 2339 MDS REPEATER

To regenerate digital BUS signal from panels or decoders transmitted through the twisted pair wires of the installation. DIN10.



ref.2424

### 4110 VIDEO SIGNAL AMPLIFIER

To regenerate a video signal when BUS length is more than 250m. Requires an amplifier for each 250m.



ref.2436

### 1345 FIBER OPTICS CONVERTER

For transmission of MDS signals (audio, video and data) through a fiber optics cable (single-mode fiber with FC/PC connectors). Includes Tx, Rx and power supply.

Necessary elements in complete MDS installations in general entrances and interior blocks with analogue terminals (See analogue system section).



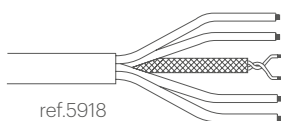
ref.2419

### 2424 MDS 4-WAYS AUDIO DECODER

### 2425 MDS 8-WAYS AUDIO DECODER

### 2436 4-PANELS DECODER

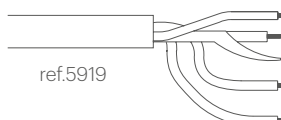
1 unit per 4 panels 4+N of up to 2 push buttons. For installation in lifts or garages, in order to make calls to concierge. DIN10.



ref.5918

### 2466 PC DECODER PROGRAMMING MODULE

### 24661 USB ADAPTOR TO RS485



ref.5919

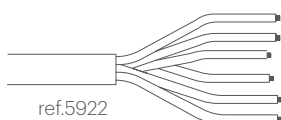
### 2418 MDS 4-WAYS VIDEO DISTRIBUTOR

### 2419 MDS 8-WAYS VIDEO DISTRIBUTOR

### 2429 8 MDS/AC+ SENSOR DECODER. DIN10

### 2430 8 MDS/AC+ RELAY DECODER. DIN10

1 unit per 8 relay outputs for activation of an electrical device of up to 2A, 250V.



ref.5922

All cables are supplied in 100 metres rolls. Orders must be multiples of 100.

### 5918 DECODER-PANEL-FXL CENTRAL UNIT BUS CABLE (1M)

4 wires 1mm<sup>2</sup>+1 twisted pair shielded of 2 x 0,5 mm<sup>2</sup>.

### 5919 VIDEO BUS CABLE (100M)

3 wires of 1mm<sup>2</sup>+1 coaxial of 75 Ohms.

### 5922 DECODER-TELEPHONE CONNECTION CABLE (1M)

6 wires of 0,5mm<sup>2</sup>.

## 8. MONITORS AND TELEPHONES

4+N telephones. Check out the Analogue section page 120.

VDS monitors and telephones. Check out the VDS section page 86.



4+N

**FERMAX**





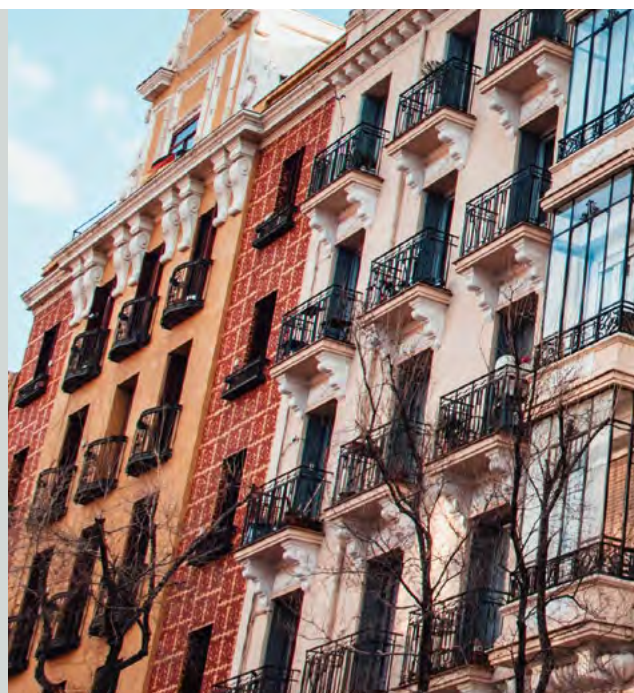
Solutions for buildings

4+N wires



THE ANALOGUE SYSTEM USES 4 COMMON WIRES FOR THE ENTIRE INSTALLATION PLUS 1 CALL (OR CALL RETURN) WIRE PER HOME (4+N). N IS THE NUMBER OF HOMES.

- It is recommended in small/medium-sized buildings, 7 accesses maximum.
- The AMPLIFIER includes volume potentiometer, both outdoor panel-monitor and monitor-outdoor panel, to adjust the optimal volume.



## COMPOSITION



Available **two models of amplifiers:**

**A) Building or Complete Amplifier.**

**B) Kit or Basic Amplifier.**

The **Complete model**, in addition to the functions in the Basic model, includes:

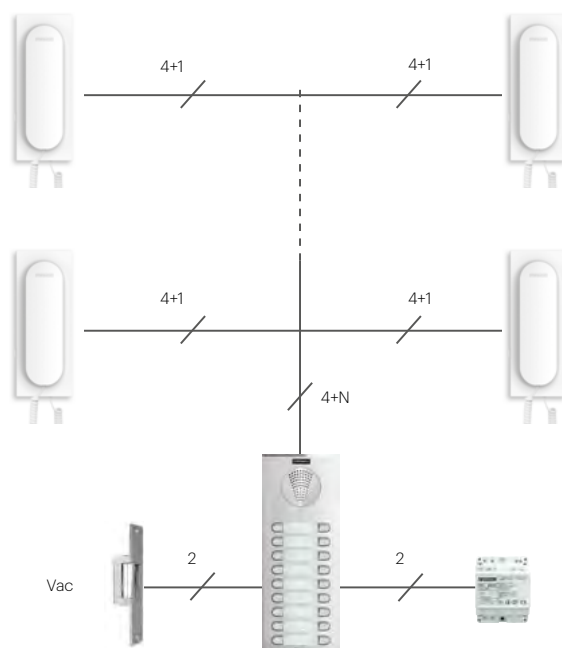
- 1) Possibility of selecting the type of call (electronic or buzzer).
- 2) Possibility of selecting type of installation: FERMAX (parted grounds) or Universal (common ground).
- 3) Voice synthesiser with the message 'The door is open' up to 32 languages.
- 4) Connector for outdoor panels in MDS system.
- 5) Second call tone (Cp2).
- 6) Possibility to connect the One-to-One module (ref.7448) for people with hearing impairment.  
The One-to-One module with induction loop (ref.7452) is not compatible with the 4+N system.
- 7) In CITYLINE panels, the cardholder lighting is always activated as standard. In CLASSIC panels, the Complete or Building model, the cardholder is as default without lighting, but the amplifier has a push button which illuminates the cardholders while the button is pressed.



## SYSTEM FEATURES

<b>Wiring</b>	4+N
<b>Number max. of homes</b>	Unlimited. As much as call wires
<b>Number max. of outdoor panels</b>	7
<b>Central Unit</b>	No
<b>Maximum distance</b>	Limited. Depends on cable type
<b>Communication privacy outdoor panel-home</b>	No
<b>Indoor terminal programming</b>	Programming of indoor terminal not required
<b>Voice message in amplifier</b>	Only in building amplifiers
<b>Colour camera</b>	No. Only audio.

## AUDIO DIAGRAM



## 1. OUTDOOR PANEL



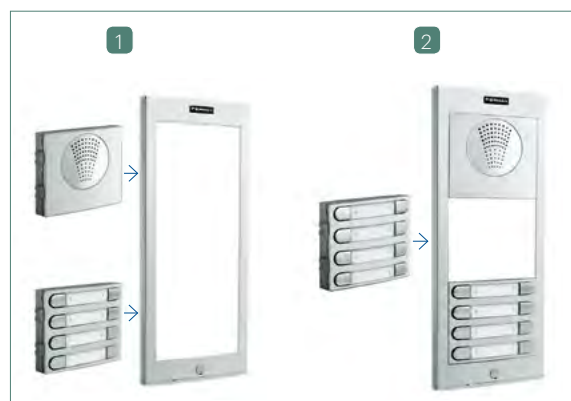
### SKYLINE PANEL

Outdoor panel for contemporary installations that require multiple integration systems: information, communication and access control.

SKYLINE manufacturing materials include anodised aluminium profile, chromed zamak push buttons and reinforcements, polycarbonate transparent elements and stainless steel inner grids.

Its versatility makes it the only panel able to fulfil any requirements which may arise in any residential, industrial or service sector project. Its modular design and versatility provide **TOTAL CREATIVE FREEDOM** to create any imaginable combination.

SKYLINE consists of 8 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. W is twice the size of V.



The module-frame clip-on assembly system is very simple and effective. The modules fit perfectly into the profile. Watertight tapes prevent water and dirt to get in. Once the panel is assembled, the different modules are connected to each other.

Dimensions: (width) x (height) x (depth) mm.



SKYLINE consists of 8 different-sized frames where different modules can easily be fitted. Modules come in 2 sizes, designated V and W. W modules is twice the size of V.

## FRAMES



## AUDIO



ref.7400 Complete W\*  
ref.7399 Basic V

## DOUBLE PUSH BUTTONS



ref.7369 8 PUSH. 2x4 W  
ref.7370 4 PUSH. 2x2 V  
ref.7374 2 Push. 2x1 V

## SINGLE PUSH BUTTONS



ref.7365 4 PUSH. 1x4 W  
ref.7366 2 PUSH. 1x2 V  
ref.7373 1 PUSH. 1x1 V

## INFORMATIVE MODULES



ref.7445 Cardholder W  
ref.7444 Cardholder V  
ref.7448 OneToOne V

## STAND-ALONE ACCESS CONTROL



ref.7438 Direct Keypad W  
ref.6936 Fingerprint W  
ref.7440 Proximity V

## ACCESSORIES



ref.7443 Metallic complement W  
ref.7442 Metallic complement V

## SKYLINE PANEL ACCESSORIES

See accessories page 120.

If the configuration calls for more than one panel, a connection cable ref.2541 between them is needed (1 cable per additional panel). They can be joined laterally within the same series by means of a joining bolts set (ref.8829). Select the corresponding flush box.

Note: Read more about the Complete amplifier functions on the page 114.

## 1. OUTDOOR PANEL



### CITYLINE PANEL

**CITYLINE** is a monoblock concept panel. It is characterised by its curved profile and distinctive push buttons.

There are 9 different panel dimensions called "SERIES", all with the same width but different height and push button capacities.

It is manufactured in a highly weather resistant **anodised aluminium profile** (IP43 IK7). The push buttons and displays are chromed zamak, the amplifier frontal in aluminium and the interior is protected by a stainless steel grid.

The watertight push buttons are designed and tested in the most demanding conditions to achieve great durability and reliability.

### PUSH BUTTON CITYLINE PANELS

Select the panel according to the number of apartments. In case that several flush boxes of the same size are combined, it will be necessary to use the Joining Bolts Set (ref.8829).

#### SERIES 1 // Panel: 130x128

Flush box (ref.8851): 115x114x45



ref.70701  
1 Push.

ref.70001  
2 Push.

#### SERIES 3 // Panel: 130x175

Flush box (ref.8853): 115x162x45



ref.70721  
3 Push.

ref.70021  
6 Push.

#### SERIES 4 // Panel: 130x199

Flush box (ref.8854): 115x185x45



ref.70741  
4 Push.

ref.70041  
8 Push.

#### SERIES 5 // Panel: 130x246

Flush box (ref.8855): 115x233x45



ref.70121  
10 Push.

ref.70131  
12 Push.

#### SERIES 6 // Panel: 130x294

Flush box (ref.8856): 115x280x45

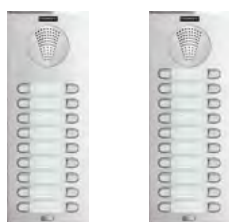


ref.70221  
14 Push.

ref.70231  
16 Push.

#### SERIES 7 // Panel: 130x341

Flush box (ref.8857): 115x328x45



ref.70321  
18 Push.

ref.70331  
20 Push.

#### SERIES 8 // Panel: 130x389

Caja emp. (ref.8858): 115x375x45



ref.71141  
22 Push.

ref.71151  
24 Push.

Dimensions: (width) x (height) x (depth) mm.

## 1. OUTDOOR PANEL



## CITYLINE CLASSIC PANEL

Cityline Classic is the range of audio door entry panels for small buildings. It stands out for its design, versatility and curved-convex profile. There are 9 continuous profile series, all of them the same width but with different heights and button capacities.

- The **PANELS** are made of highly weather-resistant anodised aluminium. A cellular rubber waterproof seal, ensures perfect fitting of the panel in the wall, preventing water from getting in.
- The **METAL PUSH BUTTONS** have a rounded shape, to keep with the curved profile of the panel. They can be double or single. The amplifier emits a confirmation sound when the button is pressed.
- The **AMPLIFIER** is manufactured in SMD (Surface Mounting Device) and subject to a process of tropicalisation to withstand the most adverse weather conditions. It has: front button for lighting of card-holders, volume controls in both directions for optimum sound level free from feedback, call confirmation sound, voice synthesiser in different languages, etc.

NOTE: These panels include the Complete or Building amplifier. (See page 98 to find out the differences compared to the Basic or Kit amplifier).

**SERIES 1 // Panel: 130x128**

Flush box (ref.8851): 115x114x45



ref.8500  
1 Push.

ref.8501  
2 Push.

**SERIES 3 // Panel: 130x175**

Flush box (ref.8853): 115x162x45



ref.8560  
3 Push.

ref.8562  
6 Push.

**SERIES 4 // Panel: 130x199**

Flush box (ref.8854): 115x185x45



ref.8593  
4 Puls.

ref.8591  
8 Puls.

**SERIES 5 // Panel: 130x246**

Flush box. (ref.8855): 115x233x45



ref.8620  
10 Push.

ref.8621  
12 Push.

**SERIES 6 // Panel: 130x294**

Flush box (ref.8856): 115x280x45



ref.8660  
14 Push.

ref.8661  
16 Push.

**SERIES 7 // Panel: 130x341**

Flush box (ref.8857): 115x328x45



ref.8700  
18 Push.

ref.8701  
20 Push.

**SERIES 8 // Panel: 130x389**

Flush box (ref.8858): 115x375x45



ref.8740  
22 Push.

ref.8741  
24 Push.

Dimensions: (width) x (height) x (depth) mm.



## SKYLINE/CITYLINE/CITYLINE CLASSIC PANEL ACCESSORIES

If several flush-mount panels from the same series are combined, they can be joined laterally with a joining bolts set (ref.8829). Select the flush box corresponding to the series of the panel.

	S1	S2	S3	S4	S5	S6	S7	S8	S9
<b>Flush box</b>	ref.8851 115x114x45	ref.8852 115x138x45	ref.8853 115x162x45	ref.8854 115x185x45	ref.8855 115x233x45	ref.8856 115x280x45	ref.8857 115x328x45	ref.8858 115x375x45	ref.8982 115x420,5x45
<b>Classic surface box</b>	ref.8951 130x128x33	ref.8952 130x151x33	ref.8953 130x175x33	ref.8954 130x199x33	ref.8955 130x246x33	ref.8956 130x294x33	ref.8957 130x341x33	ref.8958 130x389x33	ref.8984 130x436,5x33
<b>City/Sky surface box</b>	ref.7061 130x128x33	ref.7062 130x151x33	ref.7063 130x175x33	ref.7064 130x199x33	ref.7065 130x246x33	ref.7066 130x294x33	ref.7067 130x341x33	ref.7068 130x389x33	ref.7069 130x436,5x33
<b>Simple hood</b>	ref.8400 135x130	ref.8401 135x155	ref.8402 135x177,5	ref.8403 135x203	ref.8404 135x250	ref.8405 135x300	ref.8406 135x345	ref.8407 135x393	ref.8480 135x440,5
<b>Simple frame</b>	ref.8251 225x310	ref.8252 225x310	ref.8253 225x375	ref.8254 225x375	ref.8255 225x375	ref.8256 225x450	ref.8257 225x450	ref.8258 225x450	ref.8259 225x495

## 2. TELEPHONES



VEO



EXTRA

Made of high-impact ABS with a texturised finish for easy cleaning and ultraviolet protection. They have several attachment points for wall mounting, as well as a coiled cord with telephone plug connectors. The LOFT and VEO model incorporates a magnet located in the handset that facilitates to hang it up correctly.

**3431** UNIVERSAL VEO TELEPHONE

**3426** VEO 4+N TELEPHONE

Dimensions: 82x214x43mm

**3394** EXTRA LOFT 4+N TELEPHONE

Dimensions: 85x220x40mm

**80447** BASIC CITYMAX 4+N TELEPHONE

**8084** PALACE CITYMAX TELEPHONE (PEARL)

Dimensions: 80x210x60mm



citymax

## MODELS

## FUNCTION

VEO 4+N TELEPHONE BASIC CITYMAX TELEPHONE VEO UNIVERSAL TELEPHONE	Call to guard and door opener button.
EXTRA LOFT TELEPHONE	Call volume control (3 positions: OFF, medium, high) 2 additional functions F1 and F2 (sending of negative to open the relay, timer, etc...).
PALACE CITYMAX TELEPHONE	Intercommunication: internal communication between indoor terminals in the same home (max. up to 12 indoor terminals). It requires 1 power supply 18Vdc (ref.4830 or ref.4812) per home and a multiway switcher (ref.9017)

## FINISH

VEO/LOFT / CITYMAX BASIC / UNIVERSAL TELEPHONE	White
PALACE	Pearl



ref.3380



ref.3749




ref.3389



ref.3388

## TELEPHONE ACCESSORIES

FERMAX desktop supports are made of high quality stainless steel (AISI 316L).

- 3749** VEO/LOFT TELEPHONE DESKTOP SUPPORT
- 3380** LOFT TELEPHONE DECORATIVE FRAME. 200X240
- 3388** UNIVERSAL DECORATIVE FRAME. 120X240
- 3389** UNIVERSAL LARGE DECORATIVE FRAME. 210X240
-  **3441** LOFT HANDSET WITH INDUCTIVE LOOP
- 3443** VEO HANDSET WITH INDUCTIVE LOOP

## 3. DISTRIBUTORS/SWITCHERS

## BUILDING WITH 2 ACCESSES

- 1 Power supply/distributor (ref.88231)
- 1 Audio switcher (ref.8811)

## MORE THAN 2 ACCESSES

- 1 Power supply/distributor ref.88231 for the first accesses.
- 1 Audio power supply (ref.4800) for each one of the other accesses.
- 1 Audio switcher (ref.8811) or video switcher (ref.8812) for each access.



ref.8811

**88231** POWER SUPPLY/VOLTAGE DISTRIBUTOR

It is required when the installation contains automatic switchers or guard unit. In these cases, it replaces power supply (ref.4800). Outputs 12Vac/1,5A and 12 Vdc/0,5A. DIN6 format.

**8811** AUDIO AUTOMATIC SWITCHER

1 per audio door-entry access. Up to 7 accesses.

**8819** 1/W AUDIO AUTOMATIC SWITCHER

To connect up to five 1/W audio panels. A switcher is required per 2 additional panels. From 3 to 5 additional panels, a switcher is required per panel.

**9017** BUS MULTIWAY SWITCHER

It is necessary when the intercommunication between telephones in the same home is required. A switcher ref.9017 is needed per home as well as a power supply of 18Vdc.

## 4. POWER SUPPLY



ref.4802



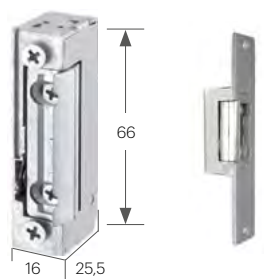
ref.4800

### FOR AUDIO INSTALLATION

**4802** POWER SUPPLY DIN4 230VAC/12VAC-1A

**4800** POWER SUPPLY DIN4 230VAC/12VAC- 1,5A

## 5. DOOR LOCK RELEASES



990 Series consumption

N,A	12Vac	250mA
	12Vdc	250mA

**67501** LOCK RELEASE 990N-P22 MAX

Normal operation and short narrow shield P22 type. 12Vac/dc

**30711** LOCK RELEASE 540N-S MAX

Normal operation and small shield. 12Vac.

**1821** LOCK RELEASE 540AB-S MAX

Sliding automatic operation and small shield. 12Vac.

**67524** UNIV. LOCK RELEASE 990A-S MAX

Normal operation 12-24Vac/dc.

NOTE: MAX: It includes adjustable latch.

## 6. ACCESSORIES



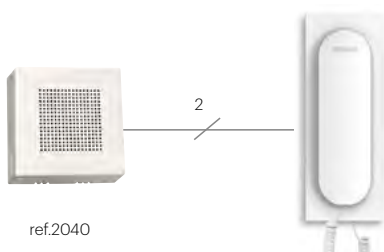
ref.4545



**4545** TELEPHONE INTERFACE

It is installed at home and connected to the telephone network. It allows communication with the outdoor panel (only audio) as well as opening the door remotely from any conventional or wireless telephone at home. It allows to forward the call to one or two external land lines or mobile telephones. For each telephone interface, a power supply unit ref. 4800 is required. It is not recommended for telephone installations with fiber optics.





## CALL ACCESSORIES

### 2040 ELECTRONIC CALL EXTENSION BELL

Device that receives the call ring of the audio door entry system. Allows for the ringtone to be heard anywhere where the device is installed. Possible to connect 1 for each telephone/monitor.

### 2068 BUZZER EXTENSION CALL

For 4+N installations by call buzzer.



ref.8053

### 8053 4+N/MDS LIGHT OR BUZZER COMMANDER

It allows to activate high-power devices or indicators when a call is received: bells, sirens, light bulbs, etc. It is possible to connect 1 per telephone.



ref.2340

### 2340 4+N/MDS CALL MULTIPLIER

Device which increases the call volume in installations with more than 5 telephones or monitors at home. Power supply 18Vdc (ref.4812).



ref.2013

## ADDITIONAL FUNCTIONS

### 2013 ADDITIONAL FUNCTIONS RELAY

It allows for the remote activation of electrical devices by an additional button on the telephone: switch on the stair light, open the garage, open a 2nd door, etc. Activation by 12Vdc, 12Vac or 18Vdc.

### 88101 DOUBLE CONTACT RELAY 18Vdc



ref.29001

### 29001 TIMER

It allows the activation of a device for a given time (programmable from 0 to 6 minutes or 0 to 60 seconds). The activation can be automatic when a call is received or by means of a specific button on the telephone or monitor.



# DOOR LOCK RELEASE

**FERMAX**



**Solutions for accesses**  
Flush mounted or Surface



# LOCK RELEASE

FLUSH MOUNTED. SURFACE

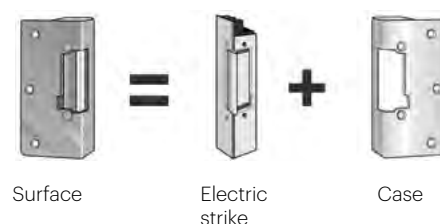
## CHARACTERISTICS

An electric **DOOR LOCK RELEASE** basically consists of an electrical strike and a shield or case, depending on the installation system (flush mounted or surface).

### FLUSH MOUNTED

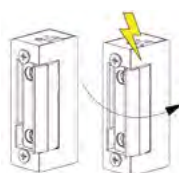


### SURFACE



## OPERATION MODES

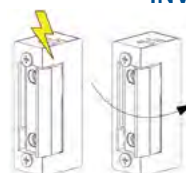
### NORMAL OPERATION N



Allows door opening while the lock is powered.

N	12 Vac activation
N-412	12 Vdc activation
N-424	24 Vdc activation

### INVERTED OPERATION N-500



Allows door opening while power to the lock release is off.

N-512	12 Vdc activation
N-524	24 Vdc activation

### AUTOMATIC OPERATION A

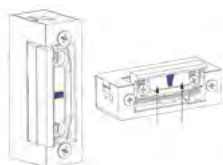
#### Ab (Sliding automatic) and Aa (Invisible automatic)

Enables door opening with a short electric pulse. The lock release is automatically blocked when the door is closed again.



#### A Automatic operation.

A	12 Vac activation
A-412	12 Vdc activation
A-424	24 Vdc activation



#### Ab Sliding automatic operation.

Lets you slide the automatic function with the MAX latch setting.

Ab	12 Vac activation
Ab-412	12 Vdc activation

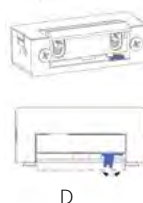


#### Aa Invisible automatic operation.

The automatic pin is suppressed to allow an easier fit to the mechanical lock. A very short electrical pulse is recommended.

Aa	12 Vac activation
Aa-412	12 Vdc activation

### ADDITIONAL OPERATION



#### - Unlocking lever - D

The lock release with D in its description indicates the addition of a manual release lever which inhibits its function, which inhibits its operation, allowing free access.

D

ND Normal operation with release.

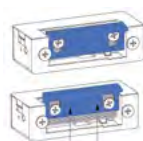
AD Automatic operation with release.



CTC

#### - Built-in microswitch - CTC.

Allows monitoring of door status (open/closed). Suitable for security systems.



MAX

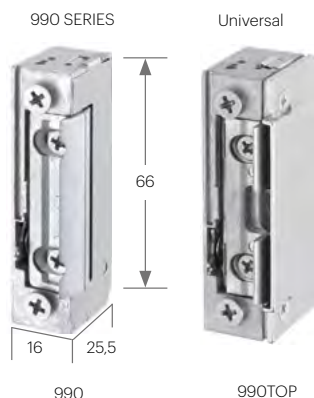
#### - Adjustable latch bolt-MAX

Allows a perfect fit between latch and bolt in the lock, with a 4mm margin. To order a MAX lock release, please add an 8 to the end of the reference of the compatible lock.

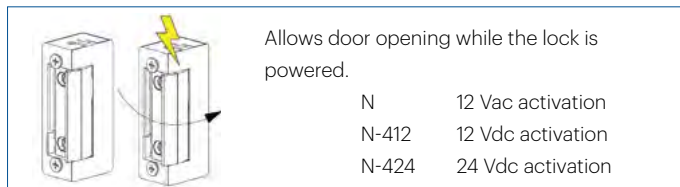
Dimensions: (width) x (height) x (depth) mm.

## 1. FLUSH MOUNTED DOOR LOCK RELEASE

### NORMAL OPERATION N



990 Series Consumption	
N	12Vac: 250mA; 12Vdc: 250mA 24Vac: 500mA; 24Vdc: 560mA
N-512	12Vdc: 175mA
MAX	+2mm



N	12 Vac activation
N-412	12 Vdc activation
N-424	24 Vdc activation

#### UNIVERSAL 10-24Vac/dc

- 67501** UNIV. LOCK RELEASE 990N-P22 MAX (short shield P22)
- 67511** UNIV. LOCK RELEASE 990ND-P22 MAX (short shield P22)
- 6750** ELECTRIC STRIKE 990N MAX
- 1813** ELECTRIC STRIKE 990ND MAX
- 1814** ELECTRIC STRIKE 990ND TOPMAX
- 67500** ELECTRIC STRIKE 990N CTC MAX
- 1817** UNIV. LOCK RELEASE 990N-L22 MAX (large shield L22)

#### STANDARD 12Vac

- 30711** LOCK RELEASE 540N-S MAX (short shield S)
- 28341** LOCK RELEASE 540ND-S MAX (short shield S)
- 1777** ELECTRIC STRIKE 540N MAX
- 1799** ELECTRIC STRIKE 540ND MAX

#### STANDARD 12Vdc

- 30701** LOCK RELEASE 540N-412-S MAX (short shield S)
- 30591** LOCK RELEASE 540ND-412-S MAX (short shield S)
- 1782** ELECTRIC STRIKE 540ND-412 MAX

#### BASIC

- 29588** LOCK RELEASE 300N-412-S MAX (short shield S)

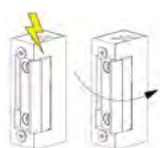
NOTE: The electric strike requires a S short shield (ref.2973) or M large (ref.2893).  
For 990 series, it's recommended a P22 short (ref.2894) shield.



540 Series Consumption	
N,A	560mA
N-412	250mA
N-512	200mA
A-424	180mA
MAX	+3mm

300 Series Consumption	
N-412	180mA
MAX	+4mm

### INVERTED OPERATION N-500



Allows door opening while power to the lock release is off.

N-512	12 Vdc activation
N-524	24 Vdc activation

#### UNIVERSAL 12Vdc

- 6780** ELECTRIC STRIKE 990N-512 MAX
- 67800** ELECTRIC STRIKE 990N-512 CTC MAX

#### STANDARD 12Vdc

- 64801** LOCK RELEASE 540N-512-S MAX (short shield S)
- 1794** ELECTRIC STRIKE 540N-512 MAX

NOTE: D-Unlocking lever, CTC-Built-in microswitch, MAX-Adjustable latch bolt, P22-Short shield 22mm wide, S-Short shield 25mm wide, L22-Large shield 22mm wide.

# LOCK RELEASE

FLUSH MOUNTED. SURFACE

FLUSH  
MOUNTED

## AUTOMATIC OPERATION A

### Ab (Sliding automatic) and Aa (Invisible automatic)

Enables door opening with a short electric pulse. The lock release is automatically blocked when the door is closed again.



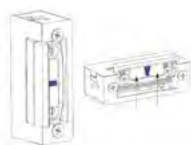
A Automatic operation.

- A 12 Vac activation
- A-412 12 Vdc activation
- A-424 24 Vdc activation



Aa Invisible automatic operation.

The automatic pin is suppressed to allow an easier fit to the mechanical lock. A very short electrical pulse is recommended.



Ab Sliding automatic operation.

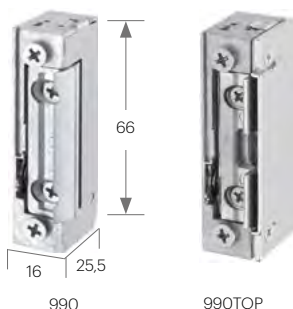
Lets you slide the automatic function with the MAX latch setting.

- Ab 12 Vac activation
- Ab-412 12 Vdc activation

Aa 12 Vac activation

Aa-412 12 Vdc activation

990 SERIES Universal



990 Series Consumption	
N	12Vac: 250mA; 12Vdc: 250mA 24Vac: 500mA; 24Vdc: 560mA
N-512	12Vdc: 175mA
MAX	+2mm

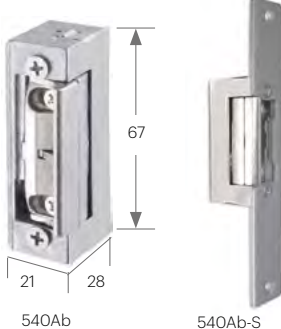
### UNIVERSAL 12-24 Vac/dc

- 67521** LOCK RELEASE 990A-P22 (short shield P22)
- 67524** LOCK RELEASE 990A-S MAX (short shield S)
- 1824** LOCK RELEASE 990Ab-P22 MAX (short shield P22)
- 1823** LOCK RELEASE 990Ab-L22 MAX (large shield L22)
- 67531** LOCK RELEASE 990AD-P22 MAX (short shield P22+unlock.lever)
- 67532** LOCK RELEASE 990AD-L22 MAX (large shield P22+unlock.lever)
- 6752** ELECTRIC STRIKE 990A MAX
- 6753** ELECTRIC STRIKE 990AD MAX (unlocking lever)

### STANDARD 12 Vac

- 30691** LOCK RELEASE 540A-S MAX (short shield S)
- 28201** LOCK RELEASE 540AD-S MAX (short shield S+unlock.lever)
- 1821** LOCK RELEASE 540Ab-S MAX (short shield S)
- 28151** LOCK RELEASE 540Aa-S MAX (short shield S)
- 64551** LOCK RELEASE 540AbD-S MAX (short shield S+unlock.lever)
- 1812** ELECTRIC STRIKE 540Ab MAX
- 1780** ELECTRIC STRIKE 540Aa MAX
- 1811** ELECTRIC STRIKE 540AbD MAX (unlocking lever)
- 1781** ELECTRIC STRIKE 540AaD MAX (unlocking lever)

540 SERIES Standard



540 Series Consumption	
N,A	560mA
N-412	250mA
N-512	200mA
A-424	180mA
MAX	+3mm

### STANDARD 12Vdc

- 1820** LOCK RELEASE 540Ab-412-S MAX
- 1810** ELECTRIC STRIKE 540Ab-412 MAX
- 1728** ELECTRIC STRIKE 540Aa-412 MAX
- 1727** ELECTRIC STRIKE 540AaD-412 MAX (unlocking lever)

NOTE: D=Unlocking lever, CTC=Built-in microswitch, MAX=Adjustable latch bolt, P22=Short shield 22mm wide, S=Short shield 25mm wide, L22=Large shield 22mm wide.



# LOCK RELEASE

FLUSH MOUNTED. SURFACE

SURFACE

## 2. SURFACE DOOR LOCK RELEASE

### NORMAL OPERATION N

2001 SERIES



ref.2923-2917

2003 SERIES



ref.2940

2000 Series consumption		
N	12Vac	980mA

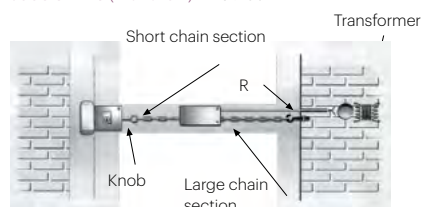
#### WITHOUT DEADBOLT ENTRY 12 Vac

- 2923** LOCK RELEASE N-2001 CHROME
- 2940** LOCK RELEASE N-2003 ANODIZED ALUM.
- 2984** LOCK RELEASE 8000N WITH CHAIN
- 3064** LOCK RELEASE PN (PANIC BAR)
- 2879** ELECT. RIM LOCK 962-DOU. KEY+PUSH BUTTON

#### WITH DEADBOLT ENTRY 12 Vac

- 3004** LOCK RELEASE 6000N GREY

8000 SERIES (with chain) ref.2984



8000 Series consumption		
N	12Vac	980mA

P SERIES (anti-panic) ref.3064



P Series consumption		
N	12Vac	980mA

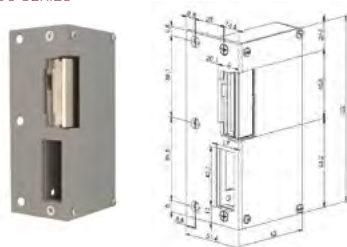
962 SERIES ref.2879



962 Series consumption		
N	12Vac	850mA
N	12Vdc	1.7A
15W / 18W		

### AUTOMATIC OPERATION A

6000 SERIES



6000 Series consumption		
N.A	12Vac	980mA

6000A DIN left

#### WITH DEADBOLT ENTRY 12 Vac

- 3005** LOCK RELEASE 6000A GREY
- 3006** LOCK RELEASE 6000AD GREY

2001-2006 SERIES



#### WITHOUT DEADBOLT ENTRY 12 Vac

- 2917** LOCK RELEASE A-2001 CHROME

#### ACCESSORIES

- 2979** SHIELD TYPE-2001 CHROME
- 2987** SHIELD TYPE-2006 GREY

Dimensions: (width) x (height) x (depth) mm.

# LOCK RELEASE

FLUSH MOUNTED. SURFACE

## 3. SPECIAL DOOR LOCK RELEASE

### INVERTED OPERATION N-500

#### ELECTROMAGNETICS



ref.3050

ELECTROMAGNETIC consumption	
12Vdc	500mA
24Vdc	250mA



ref.3052



ref.3078



ref.2837

CII SERIES  
ref.3098



700 SERIES  
ref.1086



#### 3050 FLUSH. ELECTROMAGNETIC 300KG

Electromagnetic lock release, flush mounted, inverted operation 12/24Vdc LED+CTC.

#### 3052 SURF. ELECTROMAGNETIC 300KG

Electromagnetic lock release, surface mounted, inverted operation 12/24Vdc LED+CTC.

#### 3078 L-3 BRACKET (for ref.3052)

#### 3079 BRACKET DOUBLE Z (for ref.3052)

#### 2837 U BRACKET (for ref.3052)

#### 3098 GLASS LOCK RELEASE CIIN-512-SX 12V

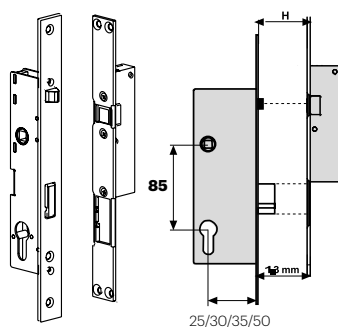
For single leaf glass doors up to 12mm.

#### 1786 ELECTRIC DROPBOLT 700N-512/524

Electric Dropbolt locks are commonly used locks which are compatible with virtually any access control system. Inverter operation.

### AUTOMATIC OPERATION A. 12VAC

#### 850 SERIES



ref.3101 / ref.3102

850 Series consumption	
12Vdc	1.350mA
12Vac	990mA

#### 3101 SEG.850/50 A AUTOMATIC LOCK

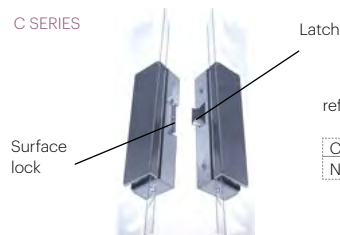
#### 3102 SEG.850/25 A AUTOMATIC LOCK

When the door is closed, the bolt is passed automatically with no need for keys.

#### 2998 GLASS CAD CHROME LOCK RELEASE

For double leaf glass doors up to 12mm. Surface lock release.

#### C SERIES



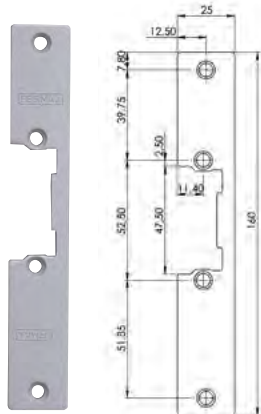
ref.2998

C Series consumption		
N.A	12Vac	980mA

Dimensions: (width) x (height) x (depth) mm.

## ACCESSORIES

Shield S



ref.2973

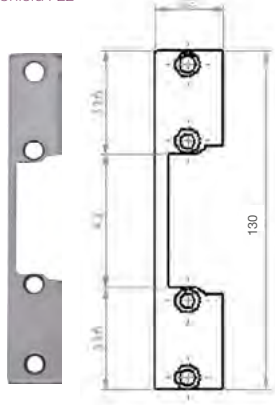
## FLUSH MOUNTED LOCK RELEASE

- 2973** S-TYPE GREY SHORT SHIELD
- 2893** M-TYPE GREY LARGE SHIELD
- 2894** P22-TYPE SHORT SHIELD
- 2892** L22-TYPE GREY SHIELD
- 2975** G-TYPE GREY LARGE SHIELD (36mm)
- 2985** GE-TYPE GREY LARGE SHIELD (12mm)

## FOR ALL TYPE OF LOCK RELEASE

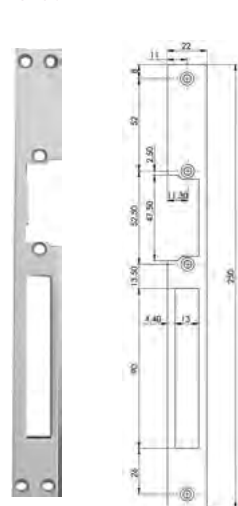
- 2913** 2C DOUBLE CONTACT (WHITE)
- 7776** 2CN DOUBLE DOOR CONTACT (BLACK)
- 2922** 3C TRIPLE DOOR CONTACT
- 3083** X1 FLEXIBLE CONDUIT (30cm)
- 3084** X2 RIGID VANDAL PROOF CONDUIT (26cm)
- 4800** POWER SUPPLY DIN4 230VAC/12VAC-1,5A
- 4802** POWER SUPPLY DIN4 230VAC 12VAC/1A
- 4813** POWER SUPPLY DIN6 100-240VAC/12VDC-2A
- 1076** MC740 G2 MAGNETIC CONTACT

Shield P22



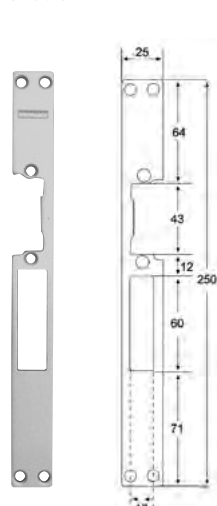
ref.2894

Shield L22



ref.2892

Shield GE



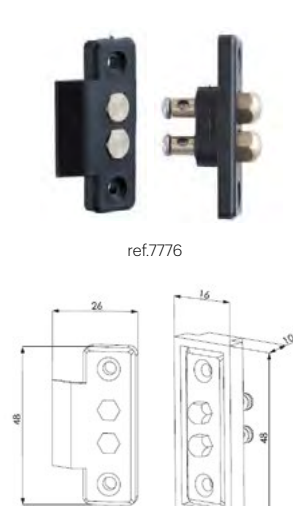
ref.2985

Contact 2C



ref.2913

Contact 2CN



ref.7776





# ACCESS CONTROL

**FERMAX**



**Solutions for accesses**  
**Stand-alone and Centralised**

# ACCESS CONTROL

STAND-ALONE AND CENTRALISED

## Designing an access control project has multiple solutions.

Fermax systems are very versatile and capable of solving the same project. To choose the optimal system and the most efficient we **recommend** the following selection guide.

## ACCESS CONTROL PROJECTS



Access Control

### Stand-alone

Without events register

UP TO 5 ACCESSES

PC not required.  
SW not required.

KITS



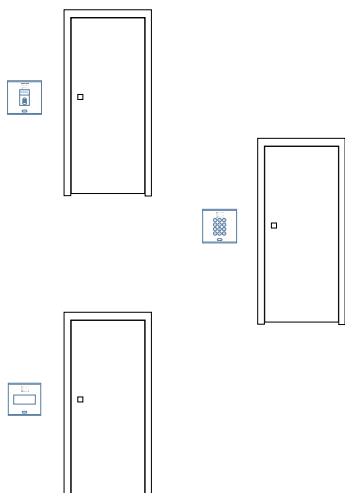
READERS



The simplest and practical way to manage a single door.

A device that can be installed both in the interior and exterior.

It can be integrated in door entry panels to enable the neighbours to access it without keys. The same identifier can be registered in several readers.



Access Control

### Centralised

With events registration. PC connection via IP.  
SW remote management. Opening from SW.  
Web service user management. With integrated fingerprint.

UP TO 20 ACCESSES

SOFTWARE



LITE

MORE THAN 20 ACCESSES

SOFTWARE



ST

CONTROLLER



acmax  
FERMAX access control system

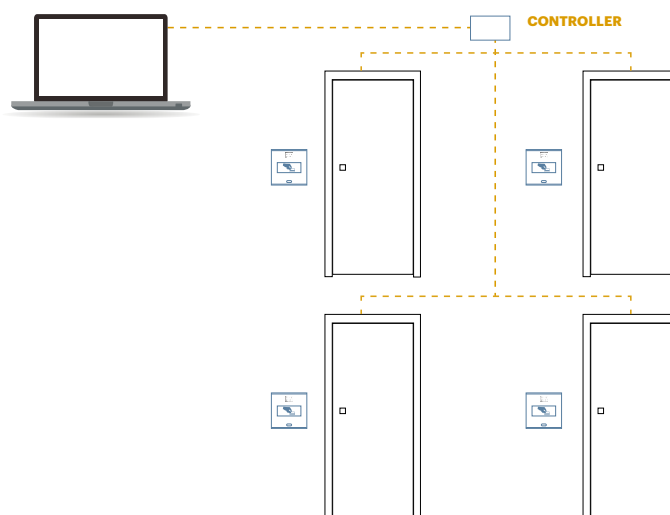
+

READERS



A centralised access control system is characterised by the fact that managing both system and users is carried out from a central device or remotely (IP) through a software program (in Windows), for the programming of the installation.

These systems feature advanced functions such as anti-passback, time control, capacity limitations, activation of devices from readers, event log in real time or offline, automation, etc.





## READERS



### KEYPAD. MEMOKEY



### PROXIMITY READER. PRIVATE



### FINGERPRINT. INKEY



### COMBINED. DUAL FUNCTION



## IDENTIFIERS

### EM 125 KHz



Card



Keyring

### Mifare 13,56 MHz



Card



Keyring

### RF 868 MHz



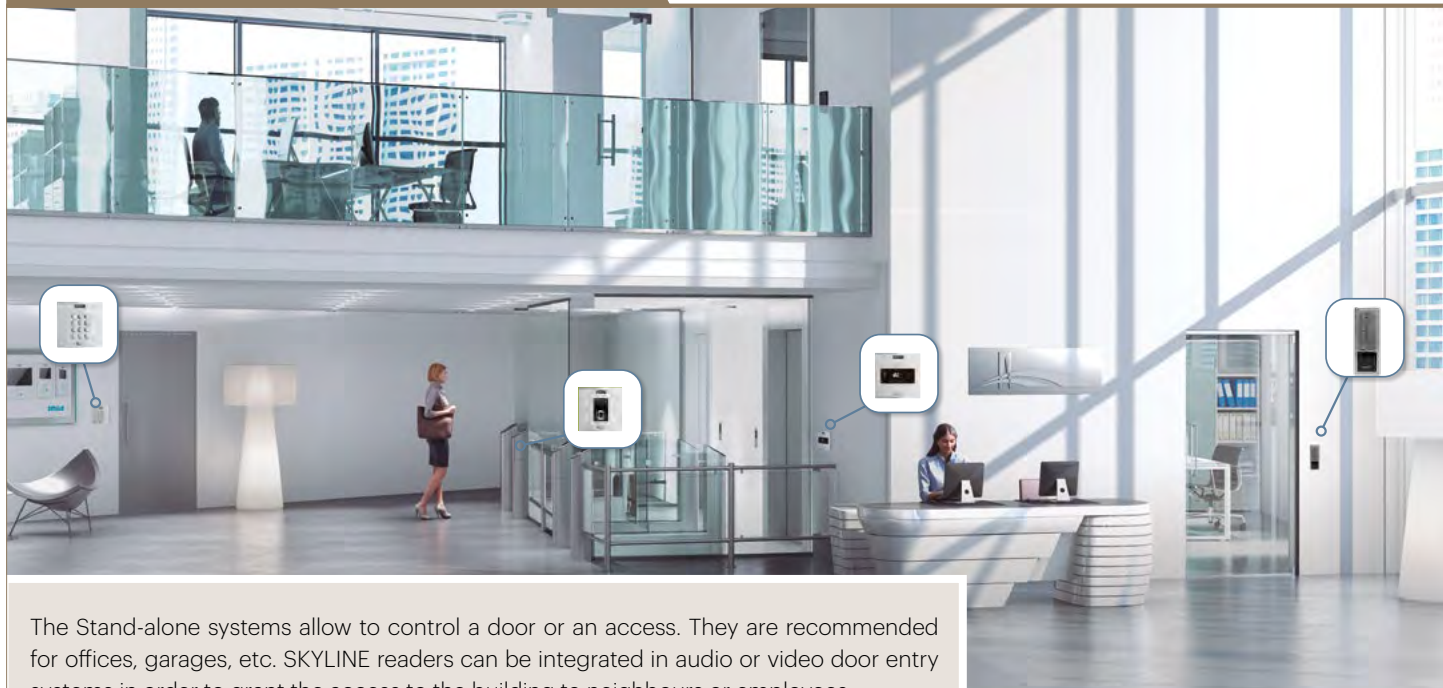
Mini remote control



Plus remote control

# ACCESS CONTROL

STAND-ALONE



The Stand-alone systems allow to control a door or an access. They are recommended for offices, garages, etc. SKYLINE readers can be integrated in audio or video door entry systems in order to grant the access to the building to neighbours or employees.

## 1. KEYPAD (PIN)

### MEMOKEY KEYPAD

→ INTEGRATED CONTROLLER

- Reader with integrated controller.
- Activates 1 or 2 devices either individually or jointly.
- Allows up to 100 codes.
- Audio and visual notification.
- Power supply 12vac/dc.
- Programming from keypad with master code.



Keypad

+



Power supply

+

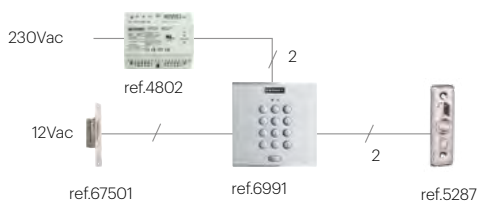


Lock release

+



Push button



ref.6991



ref.7438



ref.4699

Reader dimensions S1: 130x128  
Flush box dim. S1: 115x114x45

Reader dimensions ST1: 150x180  
Flush box dim. ST1: 130x160x55

### 4906 CITYLINE MEMOKEY KIT

It includes reader (ref.6991) and power supply (ref.4802).  
Flush mounted installation.

### 6991 CITYLINE MEMOKEY

Outdoor/Indoor. Backlighted stand-alone keypad made of zamak with signal LEDs. It includes flush box (ref.8948). Surface box is optional (ref.7061).

### 7438 SKYLINE MEMOKEY W

Accessory for SKYLINE panels.

### 4699 MARINE MEMOKEY

Outdoor. 2.5mm stainless steel with backlighted keyboard and signal LEDs.  
It includes flush box ST1 (ref.4641).

Dimensions: (width) x (height) x (depth) mm.

## RESISTANT MEMOKEY



EXTERNAL CONTROLLER

- Keypad with reduced dimensions for tight profile frames. **IP66 IK09**.
- **Integrated EM (125KHz), HID (125KHz) and MIFARE (13,56MHz) proximity reader.**
- Operation modes: code, card, card+code and multi-card+code.
- Allows up to **600 codes** and **1.000** with external controller (ref. 5276).
- Programming from keyboard with master code and MASTER ADD and MASTER DELETE cards.
- Audio and visual notification.
- Power supply 12Vac/dc.



Keypad

+



Identifiers

+



Power supply

+



Lock release

+



Push button



ref.5293

Keypad dimensions: 55x147x20mm

**5238** RESISTANT MEMOKEY KIT

Surface installation. It includes keypad (ref.5293), power supply 12 Vac (ref.4802), 3 proximity cards (ref.52750) and 2 keyrings (ref.52740) MIFARE.

**5293** RESISTANT KEYPAD W/PROXIMITY

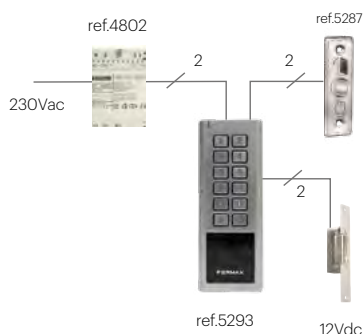
Capacity up to 600 users. Power supply 12Vac/dc.  
Programming from keyboard with master code and MASTER ADD and MASTER DELETE cards.

**4802** POWER SUPPLY DIN4 230VAC/12VAC-1A**4813** POWER SUPPLY DIN6 100-240VAC 12VDC/2A

Power supply 12Vdc. Necessary when adding external controller ref. 5276.

**5276** MINI WG STAND-ALONE CONTROLLER 1 DOOR

For more than 600 users up to 1000 or to allow code cloning between controllers. Surface installation. Power supply 12Vdc (ref.4813) recommended. Controller dim.: 65x54x9mm



## IDENTIFIERS

**52750** PROXIMITY CARD MIFARE FERMAX**52740** PROXIMITY KEYRING FERMAX MIFARE**23361** EM FERMAX PROXIMITY CARD**2336** EM PROXIMITY CARD WITH MAGNETIC BAND**4515** PROXIMITY KEYRING

ref.52750



ref.52740



ref.23361

Customisable card



ref.4515



## 2. PROXIMITY (CARD)

### PRIVATE READER

→ INTEGRATED CONTROLLER

- Proximity reader with integrated controller.
- Allows up to **400** cards **EM 125KHz**.
- Activates a device.
- Audio and visual notification.
- Open/wedged door alarm.
- Entrance sensor.

- Power supply 12Vac/dc.
- Programming with master card.
- Allows you to configure on WG 26 to connect to a external driver to increase the number of users. Up to **1000** (ref. 5276).



Reader

+



Identifiers

+



Power supply

+



Lock release

+



Push button



ref.6992



ref.7440



Reader dimensions ST: 130x128  
Flush box dimensions ST: 115x114x45

#### 4905 CITYLINE PRIVATE KIT

Flush mounted installation. Includes reader (ref.6992), power supply (ref.4802) of 12vac, 5 cards (ref.23361) and 1 keyring (ref.4515).

#### 6992 CITYLINE PROXIMITY READER

Indoor/Outdoor. Aluminium panel. Flush box included (ref.8948). Optional surface box (ref.7061).

#### 7440 SKYLINE PROXIMITY READER V

Accessory for SKYLINE and CITYLINE panels.

#### 5472 MARINE PROXIMITY READER

Outdoor. Stainless steel reader. Flush box included ST1 (ref.4641).



ref.5472



ref.2306

Reader dimensions ST1: 150x180

### ACCESSORIES

#### 2306 PRIVATE PROGRAMMING KEYPAD

#### 24661 USB ADAPTOR TO RS485

### IDENTIFIERS



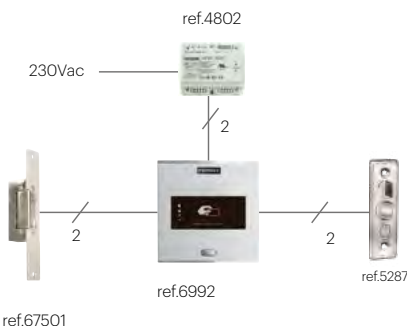
#### 23361 EM FERMAX PROXIMITY CARD



#### 2336 EM PROXIMITY CARD WITH MAGNETIC BAND



#### 4515 PROXIMITY KEYRING



ref.23361  
Customisable card



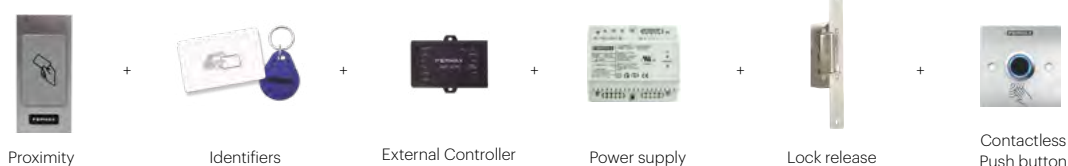
ref.4515

Dimensions: (width) x (height) x (depth) mm.

## MIFARE CLASSIC PROXIMITY READER

EXTERNAL CONTROLLER

- Reader with external controller WG.
- Allows different types of cards: **MIFARE (13.56MHz) EM (125KHz) and HID ISOProxII (125KHz).**
- Activates 1 device.
- Allows up to **1000 cards/keyrings.**
- Audio and visual notification.
- Available in RESISTANT (ref.5296) and in SKYLINE (ref. 7461), CITYLINE (ref. 6958).
- Power supply 12 Vdc.
- Programming with MASTER cards and through IR keypad included in controller ref.5276.



ref.5296



ref.6958



ref.7461

### 5237 RESISTANT PROXIMITY KIT

Surface installation. It includes reader (ref.5296), controller (ref.5276) with IR infrared keypad, power supply (ref.4813), 3 cards (ref.52750) and 2 MIFARE keyrings (ref.52740). Reader dim.: 48x103x20mm

### 5296 RESISTANT PROXIMITY READER

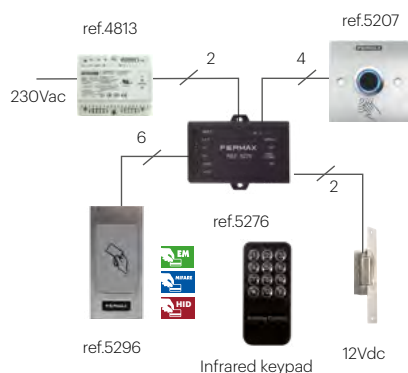
### 7461 SKYLINE WG MIFARE/EM PROXIMITY READER V

### 6958 CITYLINE WG MIFARE/EM PROXIMITY READER

### 5276 MINI WG STAND-ALONE CONTROLLER 1 DOOR

Surface installation. Power supply 12Vdc (ref.4813) recommended. Controller dim.: 65x54x9mm

### 4813 POWER SUPPLY DIN6 100-240VAC/12VDC-2A



### IDENTIFIERS

- 52750** PROXIMITY CARD MIFARE FERMAX
- 52740** PROXIMITY KEYRING FERMAX MIFARE



ref.52750



ref.52740

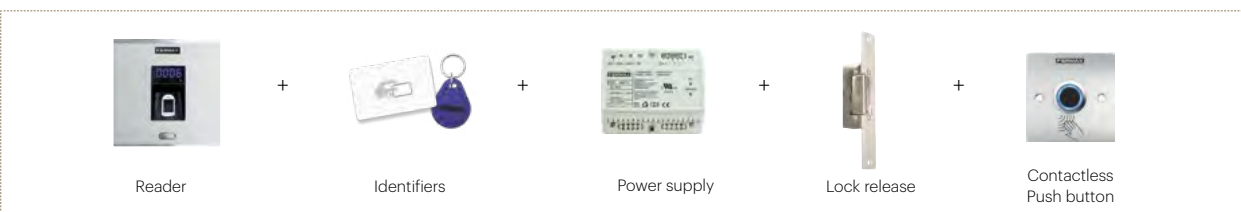
## 3. FINGERPRINT (BIOMETRIC)

### FINGERPRINT READER

→ INTEGRATED CONTROLLER

- Fingerprint reader with **proximity EM (125KHz)** and integrated controller.
- Up to **4.500 users** (1 fingerprint) or **2.975** (2 fingerprints).
- Activates a device.
- 2 operating modes: Security Mode: Double security: Fingerprint + Card or Fingerprint + Code; Standard Mode: Fingerprint or card (as default).
- Users that allow free access and unlocking door releases.
- Power supply 12Vac/dc.
- Programming, Fingerprint management can be performed in two ways:
  - Manual programming via IR keyboard included with the reader or via free SingularKey PC software available at **www.fermax.com** (device ref. 24661 required).
- Up to 15 readers on network. Allows to manage up to 300 fingerprints/cards on network.

**NOTE:** Manually registered fingerprints cannot be managed using the Singular key PC software. They will have to be registered again via PC.



ref.6935  
Reader dim.  
S1: 130x128  
Flush box dim.  
S1: 115x114x45



ref.6937

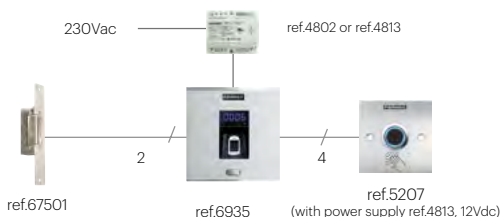


ref.6936



ref.5482

Reader dim. ST1: 150X180



#### 6935 CITYLINE FINGERPRINT READER

Outdoor/Indoor. Flush box included (ref.8948).  
Optional surface box (ref.7061).

#### 6937 CITY KEYPAD/FINGERPRINT

Flush mounted installation. Flush box included (ref.8855).  
Optional surface box (ref.7065).  
Reader dimensions S5: 130x246.  
Flush box dimensions: 115x233x45.

#### 6936 SKYLINE FINGERPRINT READER W

Accessory for SKYLINE and CITYLINE panels.

#### 5482 MARINE FINGERPRINT READER

Stainless steel. ST1 flush box included (ref.4641).

Dimensions: (width) x (height) x (depth) mm.



## INKEY MINI IP FINGERPRINT READER

→ INTEGRATED CONTROLLER

- Indoor or outdoor surface installation.
- **IP 65** protection.
- Integrated **Mifare proximity** reader.
- 1,8" display navigable by pressing in the optical reader.
- 12Vdc. power supply (It requires ref.4813).
- Stand-alone operation: Management of **5.000 fingerprints**, memory of 200.000 events, allows the cloning of fingerprints through a USB flash drive, up to **150 network readers**, adding a relay (ref.2013) to connect the electric door lock.  
(free fingerprint management software available at [www.fermax.com](http://www.fermax.com) INKEY MINI).



Fingerprint reader



Identifiers



Power supply



Relay



Lock release



Push button

ref.5233



ref.5234

### 5233 INKEY MINI IP FINGERPRINT READER

Outdoor/Indoor. Surface mount.  
Size: 48x138x38.

### 5234 USB INKEY MINI FINGERPRINT READER

Indoor. Desktop reader.

## ACCESSORIES

### COMMON ACCESSORIES

- 4813** POWER SUPPLY DIN6 100-240VAC/12VDC-2A
- 67501** UNIV. LOCK RELEASE 990N-P22 MAX 10-24Vac/dc
- 67524** UNIV. LOCK RELEASE 990A-S MAXC/DC
- 5287** FLUSH MOUNTED PUSH BUTTON (2 wires)
- 5288** SURFACE MOUNTED PUSH BUTTON (2 wires)
- 5207** CONTACTLESS PUSH BUTTON FLUSH MOUNTED (4 wires, 12 Vdc)
- 5208** CONTACTLESS PUSH BUTTON SURFACE BOX
- 1076** MC740 G2 MAGNETIC CONTACT

### ACCESSORIES FOR REF. 6935, 6936, 6937 AND 5482

- 4802** POWER SUPPLY DIN4 230VAC 12VAC/1A
- 23361** EM FERMAX PROXIMITY CARD
- 4515** PROXIMITY KEYRING
- 24661** USB ADAPTOR TO RS485

Necessary for Inkey readers with PC connection. 1-24661 is required for every 15 network fingerprint readers.

### INKEY MINI ACCESSORIES

- 52750** PROXIMITY CARD MIFARE FERMAX
- 52740** PROXIMITY KEYRING FERMAX MIFARE
- 2013** ADDITIONAL FUNCTIONS RELAY
- 1498** 12Vdc PoE SPLITTER



ref.4813



ref.67501



ref.5207



ref.5287



ref.4802



ref.24661

ref.23361  
Customisable

ref.4515



ref.52750



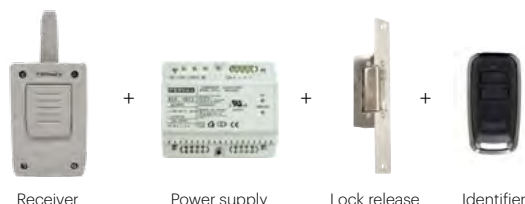
ref.52740

## 4. RADIOFREQUENCY (868MHz)

### RF RECEIVER

- RF external controller.
- Activates 1 or 2 devices individually or simultaneously. Basic MINI only 1 device.
- Allows up to **500 RF remote control**.
- RF distance: **100m**.
- Manual or radio programming.

### EXTERNAL CONTROLLER



### 5249 RF GARAGE AND SHOPS KIT

It includes receiver (ref.5250), power supply (ref.4802) and 3 remote controls (ref.5259).

### 5250 RF BASIC-2B RECEIVER

Surface installation. Power supply 12/24Vac/dc.  
2 relay outputs: 1 monostable and 1 selectable monostable/bistable.

### 5291 RF BASIC MINI RECEIVER

It can be integrated in audio and video door entry panels. Power supply 12/24Vac/dc. 1 monostable relay output. Dimensions: 60x44x18.

### 5258 USER PLUS PROGRAMMING KIT

It allows the management of the identifiers (emitters) from PC and reserve the entire memory of the receivers, blocking manual programming if desired.

### 5264 HF ANTENNA HANDS-FREE 1.5m

Surface mounted. 12/24Vac/dc. Activates the FREE ID identifier

### IDENTIFIERS

- 5259 RF KEYSINGLE-MINI REMOTE CONTROL
- 5231 RF KEYSINGLE-PLUS REMOTE CONTROL 2 BUTTONS
- 5232 RF KEYSINGLE-PLUS REMOTE CONTROL 4 BUTTONS
- 5261 RF KEYTRI PLUS2 REMOTE CONTROL
- 5273 HF IDENTIFIER HANDS-FREE
- 5265 HF WRISTBAND HANDS-FREE

### ACCESSORIES

- 4802 POWER SUPPLY DIN4 230Vac 12Vac/1A
- 4800 POWER SUPPLY DIN4 230Vac/12Vac-1,5A
- 4813 POWER SUPPLY DIN4 100-240Vac 12Vdc/2A
- 67501 UNIV. LOCK RELEASE 990N-P22 MAX 10-24ac/dc
- 67521 LOCK RELEASE 990A-P22 12-24Vac/dc

Dimensions: (width) x (height) x (depth) mm.

AC-MAX is a centralised access control system that uses advanced functions while also being simple to integrate. It is perfect for medium-sized projects.

The system allows you to comprehensively manage multiple access points distributed across various sites.

The system connects the different readers with IP controllers, using an intuitive software that allows to manage fingerprints.

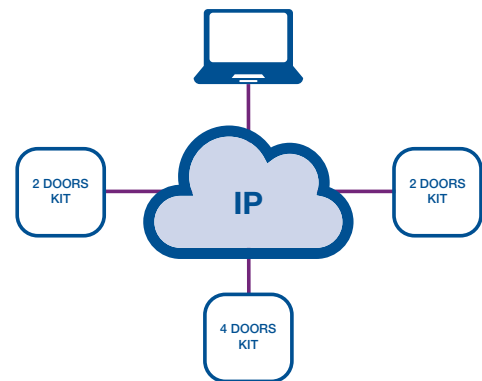
## 1. CENTRALISED AC-MAX

The system is based on IP controllers which can be installed at various network points in the same facility, with one controllers per every two or four doors.

When the doors to be secured are in different buildings, or if there is a long distance between doors in the same building, more IP controllers can be added.

The controller works with both Wiegand readers and FPAC-MAX fingerprint readers (bus RS-485).

The number of kits can easily be expanded depending on the needs of each project. They are linked using an ethernet or network point.



- User and project setup wizard
- **Web service.** Monitoring events, accesses and users.
- Email alerts
- **It allows to visualize a site map in real time to control door status and remote door opening.**
- IP automatic detection
- Multiple identifiers per user
- Present users management
- Visit management
- CCTV integration
- SQL Compact data base
- **CCTV Integration**
- Lift control (it requires additional license)
- Relay activation and sensor inputs.

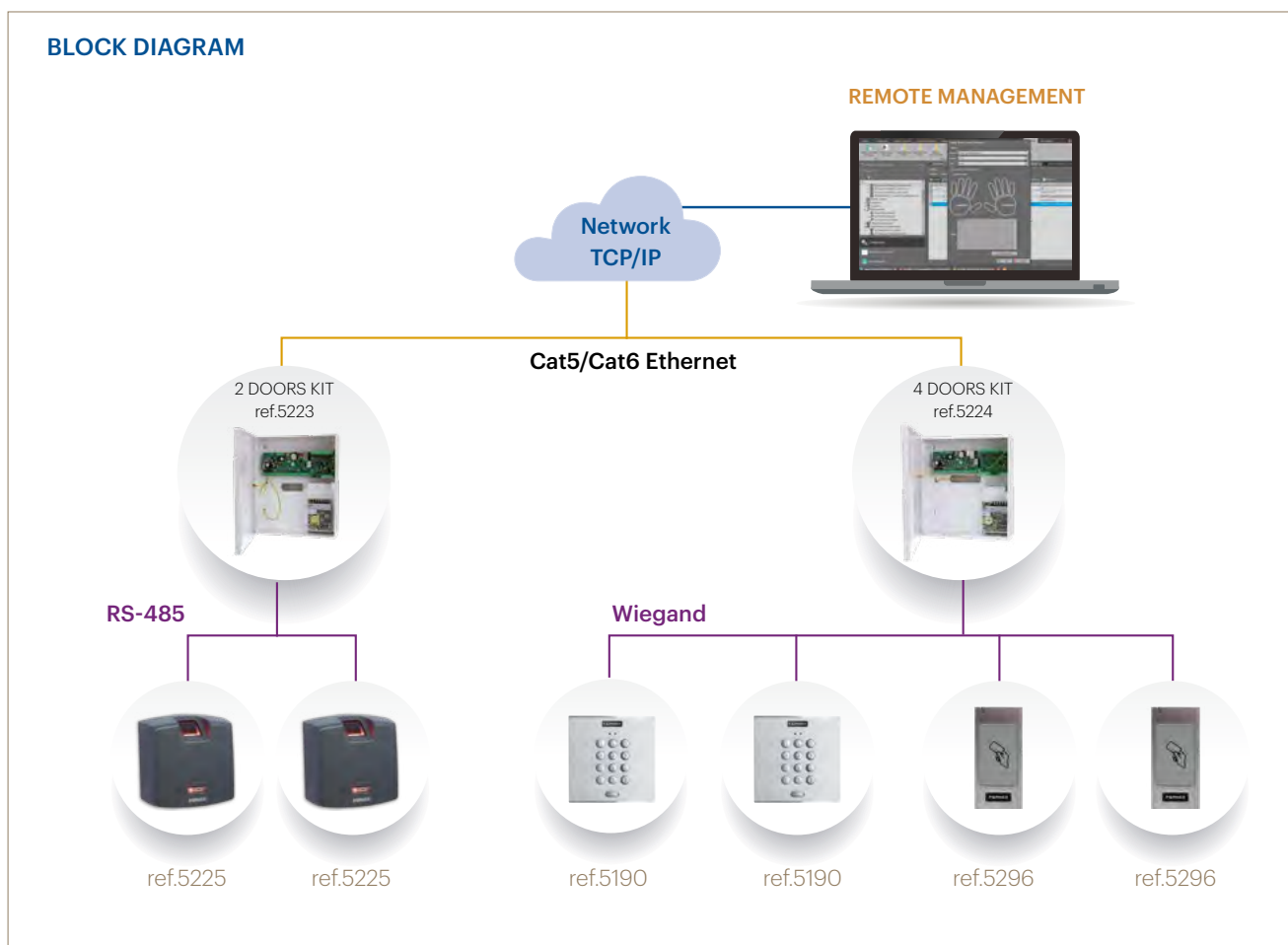
### EXTERNAL CONTROLLER



Dimensions: (width) x (height) x (depth) mm.



## BLOCK DIAGRAM



## FEATURES

SYSTEM	Centralised
CONNECTIVITY BETWEEN CENTRAL UNITS	Native IP
MANAGEMENT CONNECTION	TCP/IP
WIEGAND READERS	Prox: City, Marine, Skyline, Resistant Keypad: City, Marine, Skyline, Resistant. RF receivers.
FINGERPRINT READER	Registration of users and fingerprints from the same software.
MAX. NUMBER OF USERS	Online: unlimited Offline: 8.192 / central unit
NUMBER OF DOORS (1 READER PER DOOR)	Unlimited
MAX. NUMBER OF NETWORKED CONTROLLERS	Unlimited
MANAGEMENT OF CENTRAL UNIT EVENTS	8.000.000
RELAYS AND SENSORS	Integrated into main controller card and expander card
SCALABLE AND EXPANDABLE	Yes
SOFTWARE	Free Software

	REF.5223 2-DOOR KIT	REF.5224 4-DOOR KIT
NUMBER OF DOORS	2	4
MAX NUMBER OF ENTRY READERS	2	4*
MAX NUMBER OF EXIT READERS	2	4*

\* In the 4 door KIT it is possible to connect up to 4 Wiegand readers or 8 fingerprint readers (4 entry and 4 exit).

## SOFTWARE

**AC-MAX** has 2 free softwares:

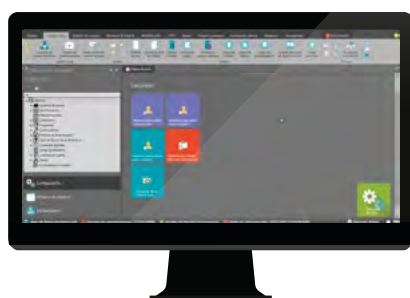
**AC-MAX ST**, with all the functions required to cover complex and big projects.

**AC-MAX LITE (LT)**, it is a simplified version which is recommended on small or medium projects (up to 20 doors) or medium complexity where it is not required a real time supervision of the system from a computer.

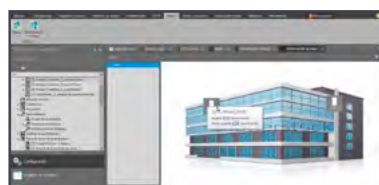
**Languages:** Spanish, English, Portuguese, French, German, Dutch.



Configuration wizard for the installer  
(ST version)



Fingerprint enrolment integrated  
on the software



Site map and online  
management (ST version)

**\*New product:** Check availability

SOFTWARE FEATURES	LT 2.0	ST 2.0
<b>CAPACITY</b>		
Licenses required	NO	NO
No. of doors	no limit	no limit
No. of users	no limit	no limit
No. of central units	no limit	no limit
No. of relays	no limit	no limit
No. of sensors	no limit	no limit
No. of events	8.000.000	8.000.000
<b>BASIC FUNCTIONS</b>		
Configuration Wizard	NO	YES
Real time event monitoring	YES	YES
Reports	YES	YES
Built in finger print enrolment	YES	YES
Site Map	NO	YES
Software remote door opening	YES	YES
Local Antipassback	YES	YES
Different operator profiles	YES	YES
Access Zones	YES	YES
Occupancy limit	YES	YES
Occupancy count	YES	YES
List of persons in a zone	YES	YES
Alarm zones	YES	YES
Automations	YES	YES
Credential expiry date	YES	YES
Different credentials per user	YES	YES

SOFTWARE FEATURES	LT 2.0	ST 2.0
<b>ADVANCED FUNCTIONS</b>		
Limited number of accesses per user	NO	NO
Global Antipassback	NO	YES
Perimetral zones	NO	YES
Client/Server installation	YES	YES
Multi Company partition	NO	YES, License required
Different projects management	YES	YES
Internet remot management	YES	YES
Time & Attendance	Basic	Basic
Basic visit management	NO	YES
Design/Print prox cards	NO	YES
Advance Authorization	NO	YES
Authentication policies	YES	YES
Asset management	NO	YES
Email alerts	NO	YES
Fire Alarm inputs	NO	YES
<b>INTEGRATION</b>		
External Database	YES	YES
CCTV video stream reception	YES	YES
API	NO	YES, License required
Lift Control	NO	YES, License required

## CENTRALISED ACCESS CONTROL SYSTEMS

In centralised Access control systems, there **3 main elements**.

**SOFTWARE** This software can be used for:

- Setting up the system (controllers, time access, zones, etc.)
- Enrol new users and their credentials (prox cards, codes, fingerprints, etc.)
- Receive and store event logs from the controller or visualize events directly on a map.
- Send door release commands or temporal door unlock.

In **big projects**, the software could be requested to be installed in an corporate server where the data base will be protected and secured providing a high reliability on access control system. At the same time, to manage the system, a client software will be installed in computers that will be operated by the security manager or reception where a manager can interact and receive information from the system. This architecture or **functionality is called SERVER / CLIENT**.

### DOOR CONTROLLER

This is the central element on the installation in which a centralised system is based.

It allows communication between the readers and the software, storing the permissions related to the doors that are controlled and can communicate with other controllers in charge of other doors.

The installation of the controller is normally located near the doors to control and it has the relays that will be used to release the door lock, as well as the sensor to detect the status of the door. The controllers have the necessary intelligence to take the right decision on granting the access or not by opening the door, even when there is no software running on installation.

### READERS AND IDENTIFIERS

The readers are connected to the controller using in most of the cases Wiegand protocol or RS-485 bus. Wiegand is the protocol widely used by most of the reader manufacturers being one of the most common standard in access control.

The user can be identified using different kind of media such as proximity cards, fingerprint, codes, or RF commands.

#### RF PROTOCOLS

There are different proximity reader protocols to read cards that offer different security levels and functionality. The more security and functionality the more cost. The most commons are:

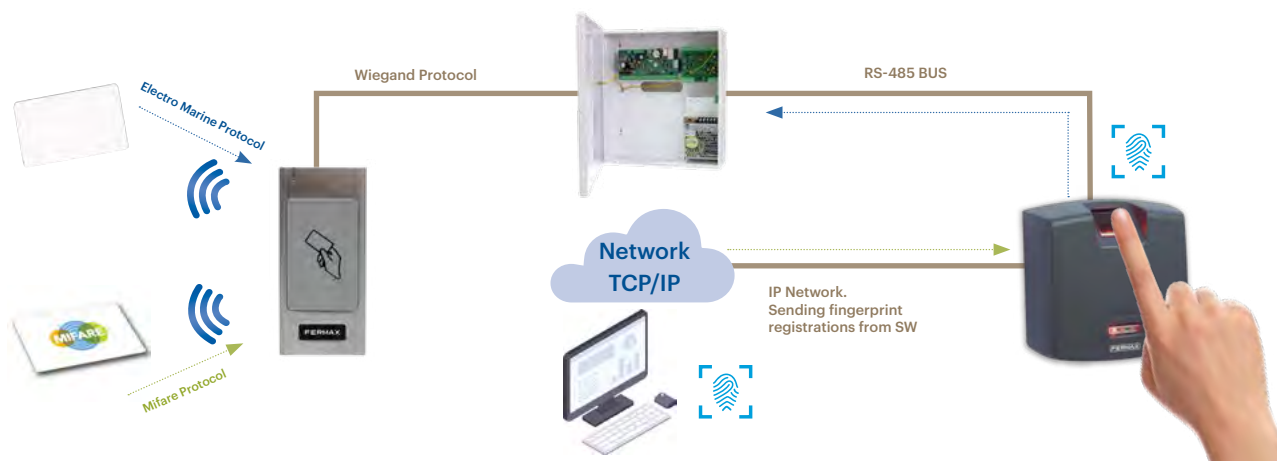
PROTOCOLS	Freq.	Security	Functionality
ELECTRO MARINE	125 KHz	★	★
HID ISO Prox II	125 KHz	★	★
MIFARE Classic	13,56 MHz	★★	★★
MIFARE Desfire	13,56 MHz	★★★★	★★★★

#### FINGER PRINT ENROLMENT

Wiegand fingerprint readers are compatible with plenty of door controller manufacturers as far as the fingerprints have been enroled. This compatibility does not guarantee that the users fingerprints can be enroled using the same controller software, since the fingerprint reader will require its own enrolment software and additional wires.

**AC-MAX allows a total integration between fingerprint reader and controller software.** With this **single software** controller it will be possible to send the new fingerprint credential\* from the computer to the reader through IP.

\* Fingerprint images will never be stored in any AC-MAX device. Only encrypted data that will help to identify the fingerprint is stored, so the real fingerprint cannot be reconstructed.





## CONTROLLERS



ref.5223



ref.5224

### 5223 2 DOORS AC-MAX CONTROLLER KIT

Includes metal box with power supply, an **IP controller unit**, and 2 door expander. Dimensions 295x285x90. PSU 2,5A

### 5224 4 DOORS AC-MAX CONTROLLER KIT

Includes metal box with power supply, an **IP controller unit**, and 4 door expander. Dimensions 325x305x100. PSU 5A

For projects with more than 4 doors, just connect additional kits to the same IP Local Area Network. All kits will be managed by the same software on the LAN.

## READERS



ref.6958

ref.6992



ref.7461

ref.7440



### ELECTRO MARINE 125 KHz

**6992** CITYLINE PROXIMITY READER

**7440** SKYLINE PROXIMITY READER V

**5472** MARINE PROXIMITY READER

**5226** ADDITIONAL ADAPTER AC-MAX

Cityline, Skyline and Marine EM require an additional adaptor (ref.5226) to connect it to AC-MAX controllers



ref.5472



ref.5296



### MIFARE CLASSIC 13.56 MHz

**6958** CITYLINE WG MIFARE/EM PROXIMITY READER

**7461** SKYLINE WG MIFARE/EM PROXIMITY READER V

**5296** RESISTANT PROXIMITY READER

(Also can read EM 125 KHz and HID ISOPROX II)



ref.5190



ref.5191

### KEYPADS

Includes an adapter circuit for AC-MAX (Ref.5226)

**5190** WIEGAND CITYLINE KEYPAD

**5191** WIEGAND SKYLINE KEYPAD

**5192** WIEGAND MARINE KEYPAD

**5293** RESISTANT KEYPAD W/PROXIMITY

(Also can read EM 125 KHz and HID ISOPROX II)



ref.5192



ref.5293



NOTE: Max wiring distance to the controller:

- Readers ref.5293,5296,6958,7461 : **100m**

- Readers ref.6992,7440,5472,5190,5191,5192: **10m**

## FINGERPRINT READER



ref.5225

### 5225 FINGER PRINT READER FPAC-MAX

Fingerprint reader with optical sensor and integrated prox card reader ISO/IEC 14443A, MIFARE. Dimensions 85x85x52.

## RF RECEIVER



ref.5266

### 5266 RF-WIEGAND RECEIVER 12 Vdc

RF receiver with a max reading range up to 100m. Can be interfaced with Wiegand 26 (4 wires from each receiver) to the controller. Dimensions 77x180x30mm.

### 5264 HF ANTENNA HANDS-FREE 1.5m

Surface installation. 12Vac/dc. Activates the handsfree identifier.

## IDENTIFIERS



ref.23361/2336



ref.52750

### MIFARE CLASSIC 13,56 MHz

#### 52740 MIFARE PROXIMITY KEYRING



#### 52750 MIFARE PROXIMITY CARD



### ELECTRO MARINE 125 KHz

#### 23361 EM PROXIMITY CARD



#### 2336 EM PROXIMITY CARD WITH MAGNETIC BAND



#### 4515 EM PROXIMITY KEYRING



ref.4515



ref.52740

### RF 868 MHz CONTROLLERS

Compatibles con receptores ref.5266.

#### 5259 RF KEYSINGLE-MINI EMITTER 2 PUSH

#### 5231 RF KEYSINGLE-PLUS EMITTER 2 PUSH

#### 5232 RF KEYSINGLE-PLUS EMITTER 4 PUSH

#### 5261 RF KEYTRI PLUS2 REMOTE CONTROL

#### 5273 HF IDENTIFIER HANDS-FREE

#### 5265 HF WRISTBAND HANDS-FREE



ref.5259



ref.5231

\*Proximity and RF Identifiers are not sequential so ID numbers are not correlative.

## ACCESSORIES

NEW



ref.5201  
72 x 155 x 20 mm



ref.5204

(check availability)

#### 5201 EXPANDER 8 INPUTS / 8 OUTPUTS (EXP8-IO)

8 input / 8 output expander board. It allows to activate up to 8 relay outputs to automate functions or simultaneous door opening. It allows to detect up to 8 sensor inputs for alarms or door status. The circuit includes DIN rail mounting adapters. It is required an additional DIN rail surface/flush box (not included in the product).

#### 5204 DESKTOP PROXIMITY READER AC-MAX (KEY3-USB)

USB desktop reader that allows the enrolment of new user credential reading the MIFARE cards directly on the software. Therefore it is not required to write the printed code on the prox. card. Includes the USB desktop cable and support.

#### 1608 AC-MAX LICENSE DONGLE (KEY6-USB)

Security dongle required to upload integration licenses on the SW. It is required to acquire additional integration licenses based on the number of accesses (ask for more information).

## LIFT CONTROL

NEW



ref.5222



ref.5201  
72 x 155 x 20 mm



ref.5209

#### 5222 LIFT CONTROL 8 FLOORS KIT

##### 1 x IP controller board

1 x 8 input / 8 output expander board Ref.5201

1 x built-in 8 floors license stored in local SD card Ref.5221

1 x PSU 5.4A

1 x DIN Rail metal case. (Can allocate additional 2 x Ref.5201 8 I/O)

#### 5201 EXPANDER 8 INPUTS / 8 OUTPUTS (EXP8-IO)

Board that provides **8 additional relays**, to activate 8 additional floors. The LIFT CONTROL KIT already includes 1 board so can manage **8 floors**. Up to 7 additional 8 I/O expanders can be connected and powered from LIFT CONTROL KIT.

**Total number of relays in a single LIFT CONTROL KIT will be 64.**

#### 5221 L.C. 8 FLOORS LICENSE Extension

**Digital file** to UPGRADE the Lift Control Kit with **8 additional floors**.

The LIFT CONTROL KIT already includes 1 license for 8 floors.

NOTE: When ordering 2 or more 8 Floor Licenses extensions for a LIFT CONTROL KIT, 1 single file containing all the floors will be received.

**Ref.5222 MAC address to be provided when ordering.**

#### 5209 LIFT CONTROL METAL ENCLOSURE

Metal case to allocate additional Ref.5201 8 I/O expanders

Total amount of expanders that can be allocated in this box is 4 (additional 32 relays/floors)





# TECHNICAL INFORMATION

**FERMAX**





## Technical Information

Tables  
Diagrams

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

## WAY VIDEO KITS FEATURES

**PL<sup>2</sup>**  
Plug&Play

Technology  
⊕ 2wires



### 2 WIRES WAY VIDEO KITS

### WAY-FI KIT 1431

### WAY KIT 1401/1402

### KIT WAY SLIM 1421

#### OUTDOOR PANEL

Finish	Aluminium	Zamak
Mounting	Surface	
Output +12Vdc for lock release	Yes	
Recommended lock release	Normal lock release with unlocking and adjustable latch 990ND-P22 MAX (ref.67511)	
Free potential contact	Yes	
Angular camera	(Horizontal=119°, Vertical=89°)	(Horizontal=93°, Vertical=71°)
Camera resolution (H x V)	300 x 220 (CMOS 900 TVL)	425 x 350
Voice synthesiser ("The door is...")	-	
Integrated access control	-	
Compatible with relay for 2nd door opening	Relay integrated in amplifier	Yes (relay ref.1418)
Hood included	Yes	
IP	44	43
Dimensions mm (with hood)	164x94x34	95x155x39
Possibility to add 2 <sup>nd</sup> panel	Yes (no additional device required)	Yes, (up to 3 additional panels, 4 in total, with 1 Switcher/WAY Distr. ref. 1419)
Operating temperature	[-25°C, +70°C]	

#### MONITOR

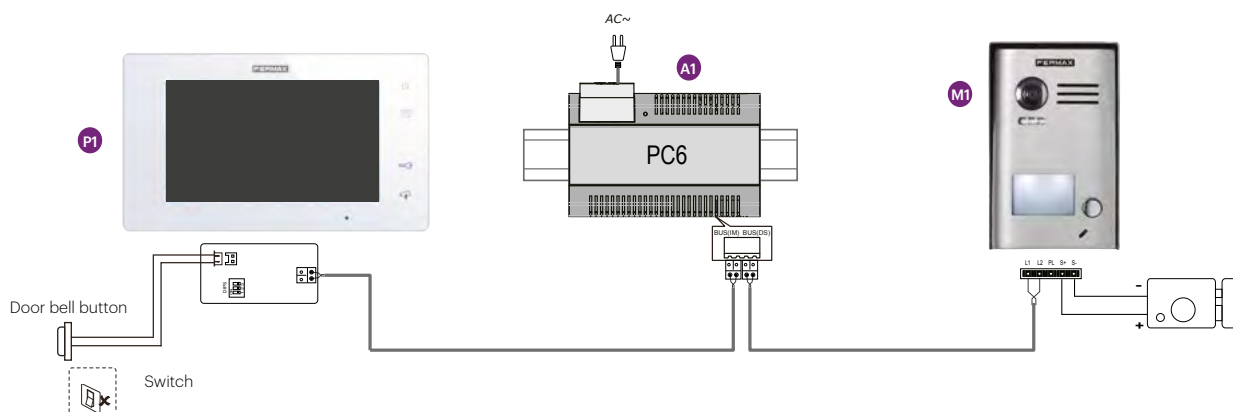
Conversation mode	Hands-free		
Screen	7" touch		4,3" touch
Screen resolution (V x H)	1024 x 600 pixels	800 x 480 pixels	
Auto-on	Yes		
Capture of images	Yes (100 photos without SD, 1.000 with SD)	Yes (118 photos)	-
Call history (with date and hour)	Yes		
Intercommunication	Yes		
Call divert to a smartphone	Yes	-	
Operation in WI-FI or 3G/4G mode	Yes	-	
Video recording (SD card not included)	Yes		-
Melodies	16	20	
Contrast control	Yes		
Volume control and Do not disturb function	Yes		
Doormatic	-		
Door bell	Yes		
Additional functions	-		
Compatibility with telephone interface	-		
Compatibility with surveillance cameras	Yes (1 additional analogue camera in each outdoor panel, total 2)	-	
Dimensions (mm)	222x154x10	225x137x17	137x137x17

Dimensions: (width) x (height) x (depth) mm.

## WAY VIDEO KITS DIAGRAM

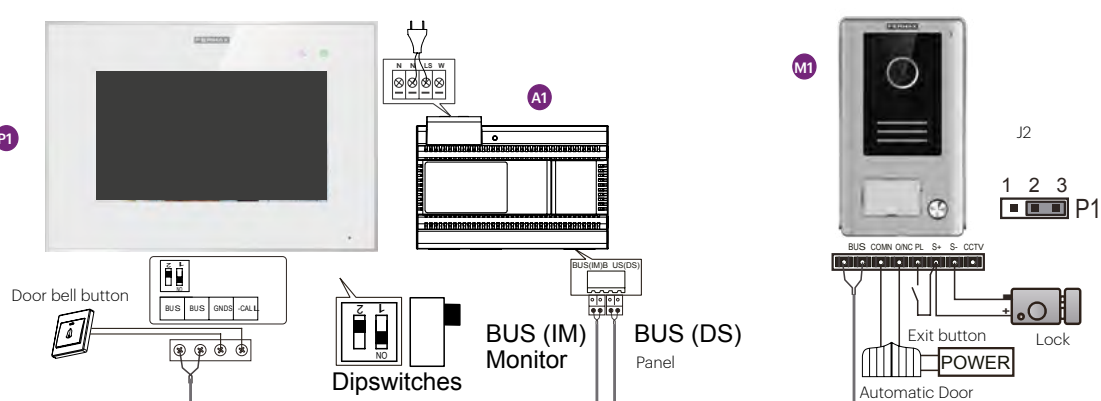
### WAY KIT (ref.1401) 1 WIRE

- P1** WAY 1/W Panel (ref.1416).
- A1** Power Supply KIT WAY DIN8 26Vdc-2A (ref.1410).
- M1** WAY 7" TFT COLOUR Monitor (ref.1412).



### WAY-FI KIT (ref.1431)

- P1** WAY-FI/1W Panel (ref.1438).
- A1** Power Supply KIT WAY-FI DIN8 26Vdc-2A (ref.1440).
- M1** WAY-FI 7" TFT COLOUR Monitor (ref.1436).



iPhone



Android

To pair the mobile device to the WAY-FI video door entry follow the steps in our video-tutorial.



# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

Visit our technical Youtube channel to solve your questions about DUOX PLUS products:  
[www.youtube.com/user/TecnicoFermox](http://www.youtube.com/user/TecnicoFermox)

## DUOX PLUS VIDEO KITS FEATURES



DUOX PLUS VIDEO KITS	VEO-XL WIFI KIT	VEO-XS WIFI KIT	VEO WIFI KIT	VEO-XS WIFI MARINE KIT	VEO-XS WIFI MARINE BLACK KIT
	9471 9472	94511 94521	94411 94421	50731	50831
OUTDOOR PANEL					
Finish	Aluminium and chromed zamak			316L Stainless Steel	
Mounting	Flush mounted (Optional: surface with its corresponding box)				
Output +12Vdc for lock release	Yes				
Recommended lock release	Normal lock release with unlocking and adjustable latch 990ND-P22 MAX (ref.67511)				
Free potential contact	Yes				
Wide angle camera	(Horizontal=100º, Vertical=80º)				
Voice synthesiser ("The door is...)	Yes				
Integrated access control	-				
Accessibility icons	-				
IP/IK	IP43 IK07			IP54 IK09	
Panel dimensions (mm)	130x128			150x180	
Dimensiones caja de empotrar(mm)	115x114x45			130x160x55	
MONITOR					
Conversation mode	Hands-free		With handset	Hands-free	
Screen	7" (panoramic 16:9)	4,3" (panoramic 16:9)			
Flush mounted possibility	-				
Push buttons	Mechanical				
Auto-on	Yes (up to 3 panels)				
Photocaller (capture of images)	Yes (up to 150 photos)				
Melodies	5				
Contrast control	Yes				
Volume control and Do not disturb function	Yes				
Date and hour control	Yes				
Doormatic	Yes		-	Yes	
Door bell	Yes				
Additional functions	2 (F1, F2)				
Call forwarding to smartphones and tablets	Yes				
Video surveillance cameras	Yes. With Analogue cameras. Ref. 9444 DUOX CAMERA INTERFACE required for each camera. (Maximum 2 per installation and 1 in general entry)				
Dimensions (mm)	185x185x21	125x165x21	200x200x21	125x165x21	
Decorative frame	ref.3389 (210x240)	ref.3388 (120x240) or ref.3389 (210x240)	ref.3389 210x240	ref.3388 (120x240) or ref.3389 (210x240)	

Dimensions: (width) x (height) x (depth) mm.



DUOX PLUS VIDEO KITS	VEO-XS WIFI MARINE ONE-TO-ONE KIT	VEO WIFI ONE-TO-ONE KIT	VEO WIFI MEMOVIS. KIT	VEO-XS WIFI MEMOVIS. KIT
	50731	49081	49071	49121

OUTDOOR PANEL			
Finish	316L Stainless Steel	Aluminium and chromed zamak	
Mounting	Flush mounted (Optional: surface with its corresponding box)		
Output +12Vdc for lock release	Yes		
Recommended lock release	Normal lock release with unlocking and adjustable latch 990ND-P22 MAX (ref.67511)		
Free potential contact	Yes		
Wide angle camera	Yes (Horizontal=100º, Vertical=80º)		
Voice synthesiser ("The door is...")	Yes		
Integrated access control	-	Yes, keypad	
Accessibility icons	Yes	-	
IP/IK	IP54 IK09	IP43 IK07	
Panel dimensions (mm)	150x240	130x199	130x246
Dimensiones caja de empotrar(mm)	130x220x55	115x185x45	115x233x45
MONITOR			
Conversation mode	Hands-free	With handset	Hands-free
Screen	4,3" (panoramic 16:9)		
Flush mounted possibility	-		
Push buttons	Mechanical		
Auto-on	Yes (up to 3 panels)		
Photocaller (capture of images)	Yes (up to 150 photos)		
Melodies	5		
Contrast control	Yes		
Volume control and Do not disturb function	Yes		
Date and hour control	Yes		
Doormatic	Yes	-	Yes
Door bell	Yes		
Additional functions	2 (F1, F2)		
Call forwarding to smartphones and tablets	Yes		
Video surveillance cameras	Yes (Analogue cameras. Ref. 9444 DUOX CAMERA INTERFACE required for each camera. Up to 2 per block and 1 in general entry)		
Dimensions (mm)	125x165x21	200x200x21	125x165x21
Decorative frame	ref.3388 (120x240) or ref.3389 (210x240)	ref.3389 210x240	ref.3388 (120x240) or ref.3389 (210x240)

## TABLES AND DIAGRAMS

[www.youtube.com/user/TecnicoFermox](http://www.youtube.com/user/TecnicoFermox)

## DUOX PLUS VIDEO KITS DIAGRAM

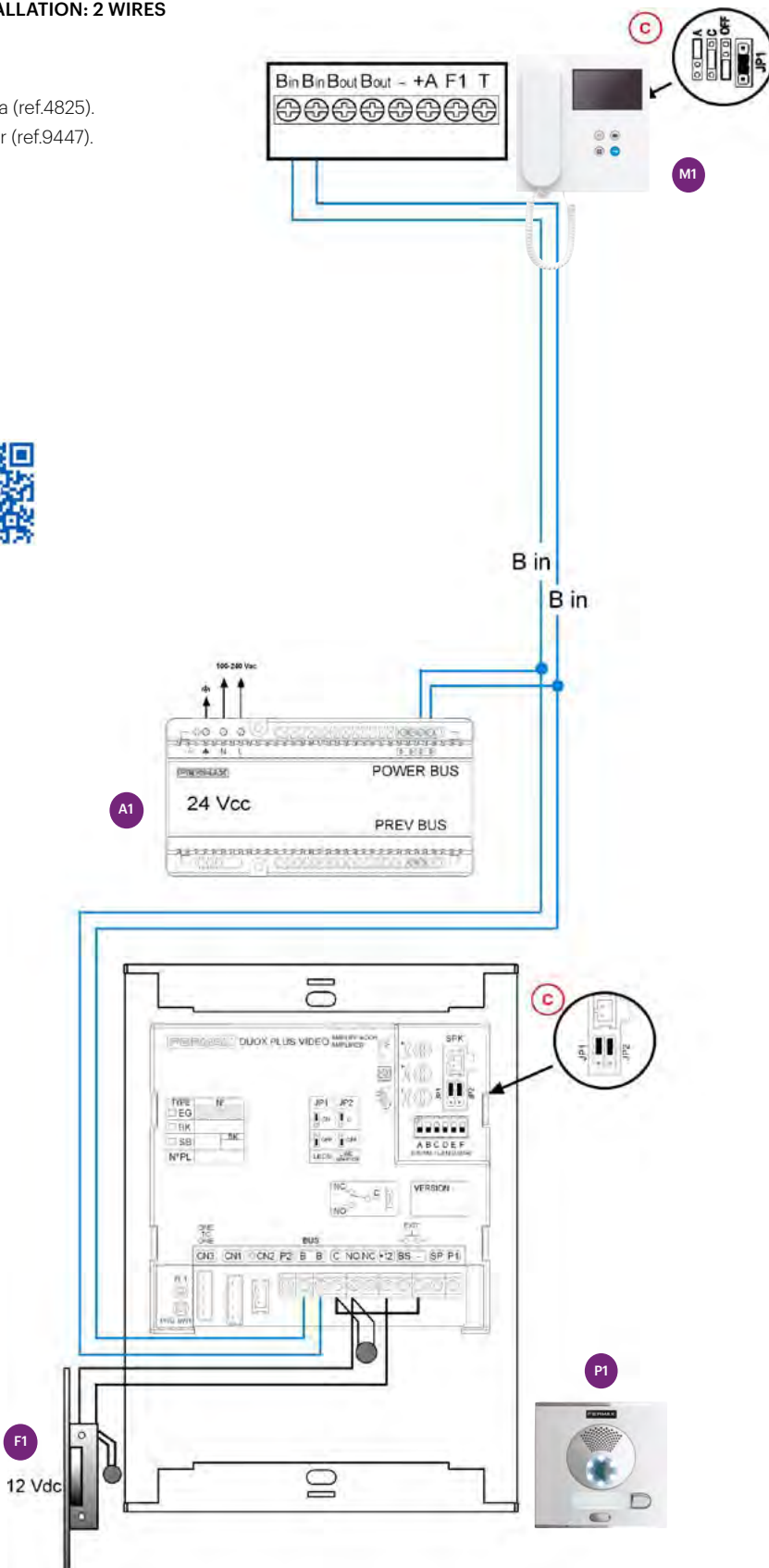
**DUOX PLUS VIDEO KIT (REF. 94411). INSTALLATION: 2 WIRES**

- P1** DUOX PLUS CITYLINE panel.
- F1** Lock release 12Vac/dc (ref.67511)\*.
- A1** Power supply unit+filter din10 24vdc-2.5a (ref.4825).
- M1** VEO WiFi Monitor (ref.9446) + Connector (ref.9447).

\*Not included in the kit.

For more information about DUOX PLUS,  
the technical books are available at  
[www.fermax.com/quickguide](http://www.fermax.com/quickguide)

If you want to follow the pairing process from a video, scan this code >>





## DUOX PLUS PANELS FEATURES

SKYLINE GENERAL FEATURES	
<b>Panel</b>	Modular. 2 module sizes (V, W). Total: 27 modules.
<b>Finish</b>	Extruded aluminium curved-convex profile and anodised finish. Injected zamak and chromed finish on push buttons, keypads and tops.
<b>IP / IK</b>	IP43 / IK07
<b>Operating temperature</b>	[-25°C, +70°C]
<b>Installation / Mounting</b>	Flush mounted/Surface. Select the corresponding box separately.
<b>Support to installer during cabling process</b>	Hinges for lateral or frontal folding of the outdoor panel.
<b>Ledge on the wall (flush mounted)</b>	19 mm
<b>Ledge on the wall (surface mounted)</b>	33 (Surface box) + 19 (Panel) mm
<b>Width</b>	130 mm
<b>Height</b>	8 series
<b>Fixing screws</b>	Frontal (2 screws). Hidden by FERMAX logo and inferior stopper.
<b>Complements</b>	Single and double hood; single and double frame; single, double and triple modular frame; single angular complement.

CITYLINE PANEL FEATURES	
<b>Panel</b>	Monoblock panel. Composed by independent modules to facilitating the maintenance. Curved-convex profile extruded aluminium and anodised finish.
<b>Finish</b>	Injected zamak and chromed finish push buttons, keypads and stoppers.
<b>IP / IK</b>	IP43 / IK07
<b>Operating temperature</b>	[-25°C, +70°C]
<b>Installation / Mounting</b>	Flush/Surface mounted. Select the corresponding box separately.
<b>Support to installer during cabling process</b>	Hinges for lateral or frontal folding of the outdoor panel.
<b>Ledge on the wall (flush mounted)</b>	19 mm
<b>Ledge on the wall (surface mounted)</b>	33 (surface box) + 19 (panel) mm
<b>Width</b>	130 mm
<b>Height</b>	9 series
<b>Fixing screws</b>	Frontals (2 screws). Hidden by FERMAX logo and inferior stopper.
<b>Complements</b>	Single and double hood; single and double frame; single, double and triple modular frame; single angular complement.

MARINE GENERAL FEATURES	
<b>Panel</b>	Monoblock panel. It is composed of independent models for facilitating the maintenance.
<b>Finish</b>	AISI 316L Stainless steel (2,5 mm thick) / Vandal-proof stainless steel push buttons.
<b>IP / IK</b>	IP54 / IK09
<b>Operating temperature</b>	[-25°C, +70°C]
<b>Installation / Mounting</b>	Flush/Surface. Select the corresponding box separately
<b>Ledge on the wall (flush mounted)</b>	2,5 mm
<b>Ledge on the wall (surface mounted)</b>	55 mm (surface box without hood)+ 2,5 (panel) mm
<b>Width</b>	150 mm
<b>Height</b>	3 series
<b>Fixing screws</b>	Frontal and vandal-proof screws.
<b>Complements</b>	Single hood for flush box.

## DUOX PLUS MONITORS FEATURES

GENERALS FEATURES	9445	9448	9468
Technology	DUOX PLUS (Full digital. 2 non polarised wires)		
Audio/video system	Audio/Colour video		
Mounting	Surface: order connector ref.9447		
Desktop support	ref.9410	ref. 9420	
Handset with magnet to facilitate the hang up	Yes	-	
Hands-free communication	-	Yes	
Optional communication: press-to-talk	-	Yes	
Induction loop version	Yes (ref. 9455)	Yes (ref. 9458)	Yes (ref. 9478)
Screen dimensions	4,3" (Panoramic 16:9)		7" (Panoramic 16:9)
Screen resolution (H x V)	480x272		800x480
Colour of the product	Matt White		
Number of push buttons	4	5	
Kind of push buttons	Mechanical		
Number of leds for light indicators	1	3	
TERMINAL ADDRESS PROGRAMMING			
From the indoor terminal	From OSD menu		
From the outdoor panel or guard unit	Yes		
From the outdoor panel through the door bell (outside the residence)	Yes		
FEATURES			
Automatic picture capture when visitors call (Photocaller)	Yes (1 photo/call, up to 150 photos, 320x240 pixels)*		
Guard Unit call	Yes (from the door opener button)		
Auto-on	Yes (up to 3 panels)		
OSD menu	Yes		
Additional function F1	Yes (sending of negative and/or command)		
Additional function F2	Yes (only sending of negative)		
Door bell	Yes		
Connection for additional devices (call extension, light/buzzer activator)	Yes (ref. 2040, ref. 2438, ref. 3267)		
Additional terminals on the same address	Yes, max. 2 add. terminals (add. p.supply can be required)		
Doormatic (automatic door release for offices, etc.)	-	Yes (configurable up to 12h)	
CONTROLS			
Date and time	Yes		
Ring tone selection	Yes (5)		
Call volume control	Yes (10 levels by OSD menu)	Yes (10 levels by OSD menu and sliding wheel)	
“Do Not Disturb” function	Yes (by OSD menu)		
Audio volume control	Yes (10 levels by OSD menu)	Yes (10 levels by OSD menu and sliding wheel)	
Adjustment of brightness, contrast and colour	Yes (by OSD menu)		
TECHNICAL FEATURES			
Product dimensions (width x height x depth) mm	200x200x23	125x165x21	185x185x21
Time to answer or open the door since the call is done	30 s.		
Conversation time	90 s.		
Conversation privacy	Yes		
Voltage	18-24Vdc		
Maximum consumption (W)	5,2	6,5 (14,4 with the inductive loop on)	9 (15,6 with the inductive loop on)
Standby consumption (W)	0,8	0,8	1,15
Working temperature (°C)	[-5°C, +40°C]		
Humidity	[0%, 90%]		
Connections	Bin, Bin, Bout, Bout, -, +A, F1, T		
Line adaptor included in the monitor (jumper JP1 positions: OFF (as default), A, C)	Yes(position as default: OFF)		

\* This function can be activated by the user. Deactivated as default.

## DUOX PLUS WiFi MONITORS FEATURES

GENERALS FEATURES	9446	9449	9469
Technology	DUOX PLUS (Full digital. 2 non polarised wires)		
Audio/video system	Audio/Video colour		
Mounting	Surface: order connector ref.9447		
Desktop support	ref.9410	ref. 9420	
Handset with magnet to facilitate the hang up	Yes	-	
Hands-free communication	-	Yes	
Optional communication: press-to-talk	-	Yes	
Induction loop version	Yes (ref. 9456)	Yes (ref. 9459)	Yes (ref. 9479)
Screen dimensions	4,3" (Panoramic 16:9)		7" (Panoramic 16:9)
Screen resolution (H x V)	480x272		800x480
Colour of the product	Matt White		
Number of push buttons	4	5	
Kind of push buttons	Mechanical		
Number of leds for light indicators	2	4	
TERMINAL ADDRESS PROGRAMMING			
From the indoor terminal	From OSD menu		
From the outdoor panel or guard unit	Yes		
From the outdoor panel through the door bell (outside the residence)	Yes		
FEATURES			
Automatic picture capture when the visitor calls (Photocaller)	Yes (1 photo/call, up to 150 photos, 320x240 pixels)*		
Guard unit call	Yes (from the door opener button)		
Auto-on	Yes (with 3 outdoor panels)		
OSD menu	Yes		
Additional function F1	Yes (sending of negative and/or command)		
Additional function F2	Yes (only sending of negative)		
Apartment door bell differentiated from the outdoor panel	Yes		
Connection for additional devices (call extension, light/buzzer activator)	Yes (ref. 2040, ref. 2438, ref. 3257)		
Additional terminals on the same address	Yes, max. 2 add. terminals (add. p.supply can be required)		
Doormatic (automatic door release for offices, etc.)	-	Yes (configurable up to 12h)	
CONTROLS			
Date and time	Yes		
Ring tone selection	Yes (5)		
Call volume control	Yes (10 levels by OSD menu)	Yes (10 levels by OSD menu and sliding wheel)	
“Do Not Disturb” function	Yes (by OSD menu)		
Audio volume control	Yes (10 levels by OSD menu)	Yes (10 levels by OSD menu and sliding wheel)	
Adjustment of brightness, contrast and colour	Yes (by OSD menu)		
TECHNICAL FEATURES			
Product dimensions (width x height x depth) mm	200x200x23	125x165x21	185x185x21
Time to answer or open the door since the call is done	30 s.		
Conversation time	90 s.		
Conversation privacy	Yes		
Voltage	18-24Vdc		
Maximum consumption (W) (paired and connected)	5,6	6.9 (14.4 with the inductive loop on)	9.9 (18 with the inductive loop on)
Standby consumption (W)	1,3	1,5	
Working temperature (°C)	[-5°C, +40°C]		
Humidity	[0%, 90%]		
Connections	Bin, Bin, Bout, Bout, -, +A, F1, T		
Line adaptor included in the monitor (jumper JP1 positions: OFF (as default), A, C)	Yes (position as default: OFF)		

\* This function can be activated by the user. Deactivated as default.

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

Visit our technical Youtube channel to solve your questions about DUOX PLUS products:  
[www.youtube.com/user/TecnicoFermox](http://www.youtube.com/user/TecnicoFermox)

## DUOX PLUS WiFi MONITORS FEATURES

### CALL FORWARDING (APP "BLUE" FOR SMARTPHONES & TABLETS)

Call forwarding to smartphones and tablets	Yes (App Compatible with iOS>=11; Android>=6)
Connectivity	Wifi (2,4 Ghz) and 3G/4G
Pairing of the monitor with the wifi router of the house.	Once the App is installed, the user must register first. Pairing by scanning a QR code in the monitor menu
Maximum number of apartments that can be managed from the App	No limit
Maximum number of smartphones/tablets where call divert from the same house can be used.	10 (including administrator's and invited user's devices)
Maximum number of users that can be invited by the administrator	5
Calls reception	Audio and Video from outdoor panels/concierge units. With pre-view before audio communication is on.
Conversation time	90 s
Mute	Yes
Video off	To reduce the data consumption when being in 4G mode
Switching of outdoor panels/cameras	Yes. It allows for switching to other panels/cameras (if any) with the same sequence than the monitors.
Auto-on	Yes. communication possible with 3 outdoor panels/cameras without being called
Activate additional feature (stair light relay, second door, etc.)	Yes. F1 button.
Door opening	Yes, protected by the unblocking code of the smartphone/tablet: PIN, fingerprint, pattern or face ID.
Concierge call	Yes
Calls register	Yes (answered calls in green; missed calls in red)
Settings	Name and picture of the house; Do not disturb; Change password; Ringtone and vibration mode.
Picture & Video capture	Not from the APP. Only automatically from the monitor
Available languages	16 (Spanish, English, French, German, Portuguese, Finnish, Czech, Polish, Dutch, Norwegian, Greek, Danish, Swedish, Hebrew, Russian, Arabic)





## DUOX PLUS TELEPHONES FEATURES

GENERALS FEATURES	3444	3452	3450
Technology	DUOX PLUS (Full digital. 2 non polarised wires)		
Audio/video	Audio		
Mounting	Surface		
Handset with magnet to facilitate the hang up	Yes		-
Hands-free communication	-		Yes
Optional communication: press-to-talk	-		Yes
Inductive loop version	Handset ref.3443	Ask for handset ref. 3441	-
Colour of the product	Matt white		
Number push buttons	1	3	
Kind of push buttons	Mechanical		
Number of leds for light indicators	-	1	3
TERMINAL ADDRESS PROGRAMMING			
From the indoor terminal	-		
From the outdoor panel or guard unit	Yes		
From the outdoor panel through the door bell (outside the residence)	Yes		
FEATURES			
Guard unit call	Yes (from the door opener button)		
Auto-on	Yes (only with No. 0 panel from its own block)		
Additional function F1	-	Yes ( F1 button, sending of negative and/or command)	
Additional function F2	-	Yes (F2 button, auxiliary command)	-
Apartment door bell differentiated from the outdoor panel	Yes		
Connection for additional devices (call extension, light/buzzer activator)	Yes (ref. 2040, ref. 2438, ref. 3267)		
Additional terminals on the same address	Yes, max. 2 add. terminals (add. p.supply can be required)		
Doormatic (automatic door release for offices, etc.)	-	Yes	
CONTROLS			
Ring tones selection	Yes (5)		
Call volume control	Yes (switch)	Yes (by sliding wheel)	
“Do Not Disturb” function	Yes (switch)	Yes (by sliding wheel)	
Audio volume control	-		
TECHNICAL FEATURES			
Dimensions (width x height x depth) mm	82x214x43	85x220x40	90x146,5x20
Time to answer or open the door since the call is done	30 s.		
Conversation time	90 s.		
Conversation privacy	Yes		
Voltage	18-24Vdc		
Maximum consumption (mA)	3,5W	3,3W	3,6W
Standby consumption (mA)	0,3W	0,29W	0,4W
Working temperature (°C )	[-5°C, +40°C]		
Humidity	[0%, 90%]		
Product weight (kg)	0,34	0,35	0,16
Line adaptor included in the terminal	Yes (position as default OFF).	-	Yes (position as default OFF).

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

## PROJECTS MATERIAL LIST. DUOX PLUS WIFI

### DUOX PLUS VIDEO. SKYLINE PANEL/ VEO WIFI AND VEO-XS WIFI MONITOR
























SKYLINE PANEL	FRAME 3V	FLUSH BOX	FRAME 4V	FLUSH BOX	5V	FLUSH BOX	6V	FLUSH BOX	7V	FLUSH BOX	8V	FLUSH BOX	JOINING CABLE BOLTS	AMPLIF. MODULE	PUSH BUTTON MODULES	204	202	201	ref.	2V	POWER SUPPLY	LINE ADAPTOR	VEO MON. + CONNECT.	VEO-XS MON. + CONNECT.
No. SERIES	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
APA.	7333	8854	7334	8855	7335	8856	7336	8857	7337	8858	7338	8882	8829	2541	73911	ref.	202	201	ref.	ref.	ref.	ref.	ref.	ref.
2	S4	1	1											1	1						1	2	2	2
4	S4	1	1											1							1	2	4	4
6	S5			1	1									1	1						1	2	6	6
8	S5			1	1									1							1	2	8	8
10	S6					1	1							1	1						1	2	10	10
12	S6					1	1							1							1	2	12	12
14	S7						1	1						1	1						1	2	14	14
16	S7						1	1						1							1	2	16	16
18	S8								1	1				1	1						1	2	18	18
20	S8								1	1				1							1	2	20	20
22	S9										1	1		1	1						1	2	22	22
24	S9										1	1		1							1	2	24	24
24	S5		2	2									1	1							1	2	24	24
26	S6				2	2							1	1	1						1	2	26	26
28	S6			2	2								1	1	1						1	2	28	28
30	S6			2	2								1	1	1						2	2	30	30
32	S6			2	2								1	1	1						2	2	32	32
32	S7						2	2					1	1							2	2	32	32
34	S7							2	2				1	1	1						2	2	34	34
36	S7							2	2				1	1							2	2	36	36
38	S7							2	2				1	1	1						2	2	38	38
40	S7							2	2				1	1	1						2	2	40	40

For installations where WIFI and NON-WIFI monitors are combined, in the consumption tables one WIFI monitor is equivalent to 3 NON-WIFI monitors.  
This table has been configured based on 1mm2 multi-wire parallel cable and floor distribution. For other situations please refer to the tables on page S4 of DUOX PLUS section.

# PROJECT MATERIAL LIST DUOX PLUS

## DUOX PLUS VIDEO. SKYLINE PANEL/ VEO AND VEO-XS MONITOR

SKYLINE PANEL																					
	FRAME 3V 7333	FLUSH BOX 8854	FRAME 4V 7334	FLUSH BOX 8855	FRAME 5V 7335	FLUSH BOX 8856	FRAME 6V 7336	FLUSH BOX 8857	FRAME 7V 7337	FLUSH BOX 8858	FRAME 8V 7338	FLUSH BOX 8982	JOINING BOLTS 8829	CABLE 2541	AMPLIF. MODULE 73911	PUSH BUTTON MODULES 201 ref.73736 202 ref.73732 204 ref.73731	BLANK MODULES V ref.7442 2V ref.7443	POWER SUPPLY + FILTER ref. 4825	LINE ADAPTOR 3255 ref.9447	VEO MONIT. + CONNECT ref.9448 + ref.9447	VEO-XS MON. + CONNECT ref.9448 + ref.9447
2 S4	1	1													1	1		1	2	2	2
4 S4	1	1													1			1	2	4	4
6 S5			1	1											1	1		1	2	6	6
8 S5			1	1											1			1	2	8	8
10 S6					1	1									1	1		1	2	10	10
12 S6					1	1									1			1	2	12	12
14 S7						1	1								1	1		1	2	14	14
16 S7						1	1								1			1	2	16	16
18 S8								1	1						1	1		1	2	18	18
20 S8								1	1						1			1	2	20	20
22 S9										1	1				1	1		1	2	22	22
24 S9											1	1			1			1	2	24	24
24 S5		2	2										1	1	1			1	2	24	24
26 S6				2	2								1	1	1	1		1	2	26	26
28 S6				2	2								1	1	1			1	2	28	28
30 S6				2	2								1	1	1	1		1	2	30	30
32 S6				2	2								1	1	1	2		1	2	32	32
32 S7						2	2						1	1	1		1	1	2	32	32
34 S7						2	2						1	1	1	1		1	2	34	34
36 S7						2	2						1	1	1			1	2	36	36
38 S7						2	2						1	1	1	1		1	2	38	38
40 S7						2	2						1	1	1			1	2	40	40

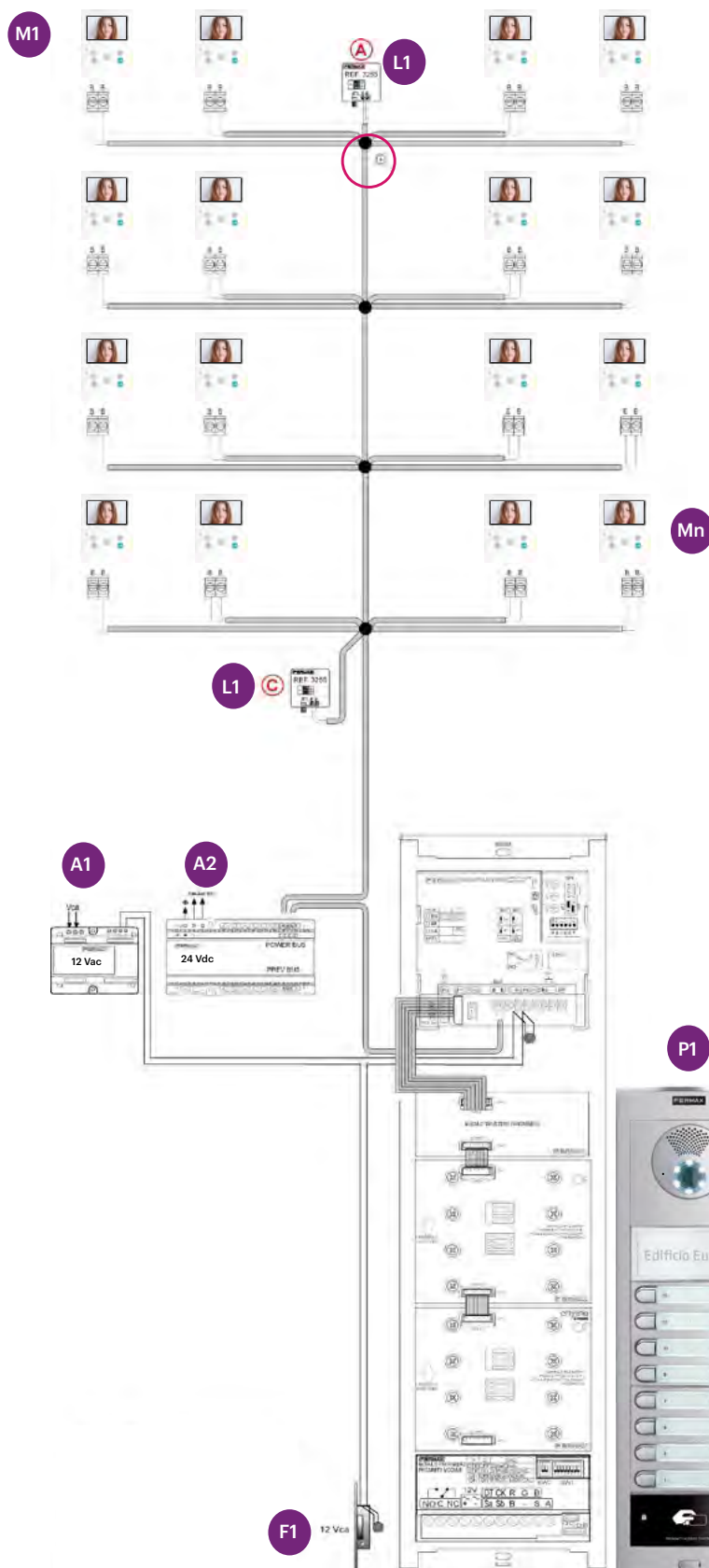
This table has been configured assuming 1mm2 multi-core parallel cable and floor distribution. For other situations, see the tables on page 54 of DUOX PLUS section.

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

## DUOX PLUS VIDEO DIAGRAM

### 1 ACCESS VIDEO DUOX PLUS TO 1 RISER OF 4 FLOORS. 4 APARTMENTS PER FLOOR



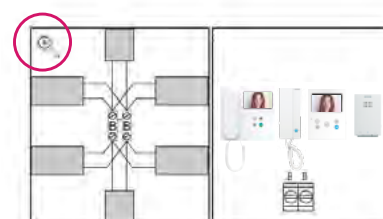
- P1 16/W DUOX PLUS SKYLINE panel.
- F1 Lock release 12Vac/dc (ref.67501).
- A1 Power supply 12Vac (ref.4802).
- A2 Power supply + filter DIN10 24Vdc-2.5A (ref.4825).
- M1 Mn VEO-XS monitor (ref.9448).
- + DUOX PLUS connector (ref.9447).
- L1 Line adaptor (ref.3255).

**DISTANCE TABLE PANEL. 1<sup>st</sup> BIFURCATION W/O REGENERATORS**  
(UP TO 40 MONITORS)

Topology	Max. Distance	Monitors
1 riser	55 m	Up to 8 monitors per floor
2 risers	50 m	Up to 4 monitors per floor
3 risers	25 m	Up to 4 monitors per floor
4 risers	25 m	Only cascade

For more information about DUOX PLUS, the technical books are available at:

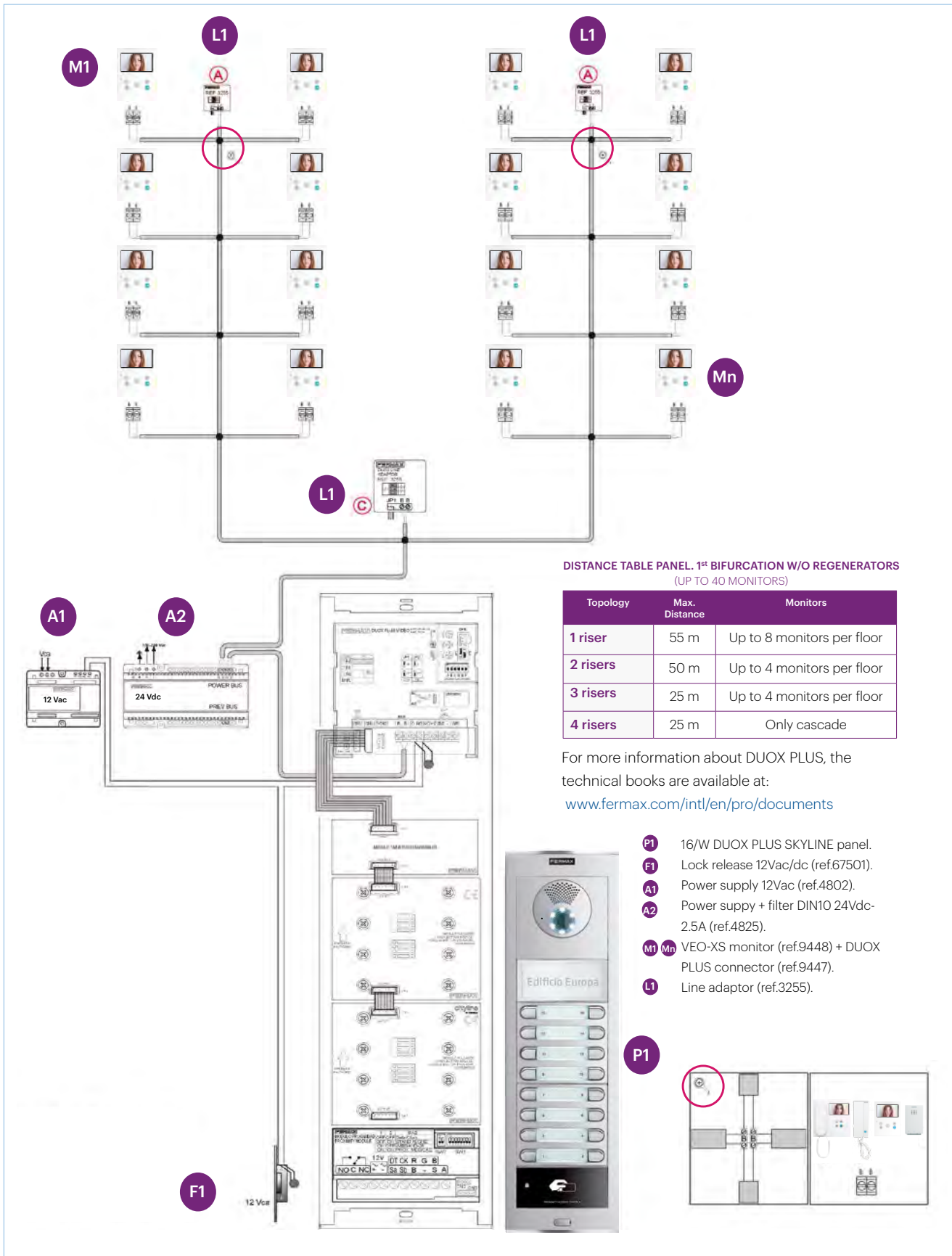
[www.fermax.com/intl/en/pro/documents](http://www.fermax.com/intl/en/pro/documents)





## DUOX PLUS VIDEO DIAGRAM

### 1 ACCESS VIDEO DUOX PLUS TO 2 RISERS OF 4 FLOORS. 2 APARTMENTS PER FLOOR

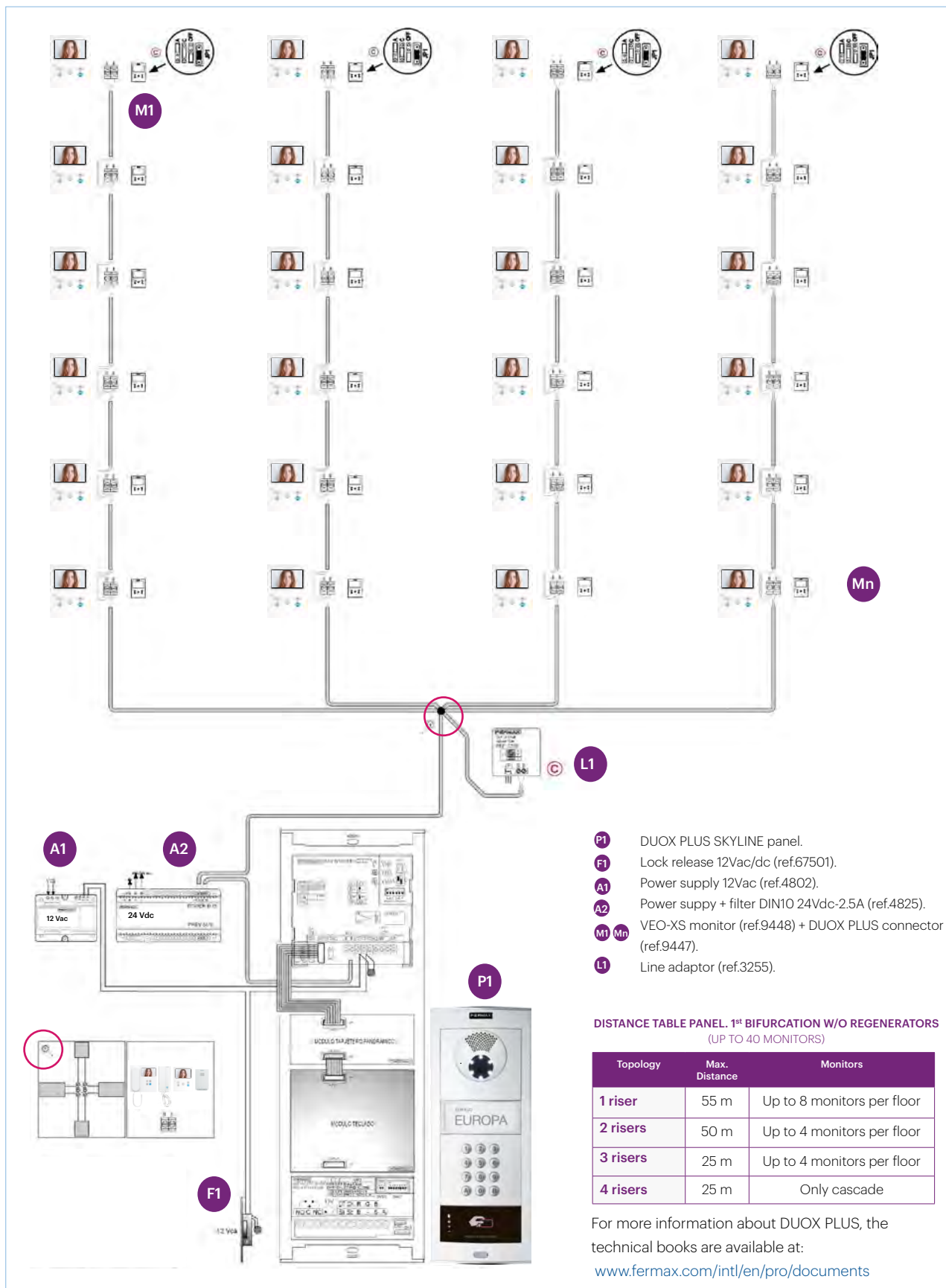


# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

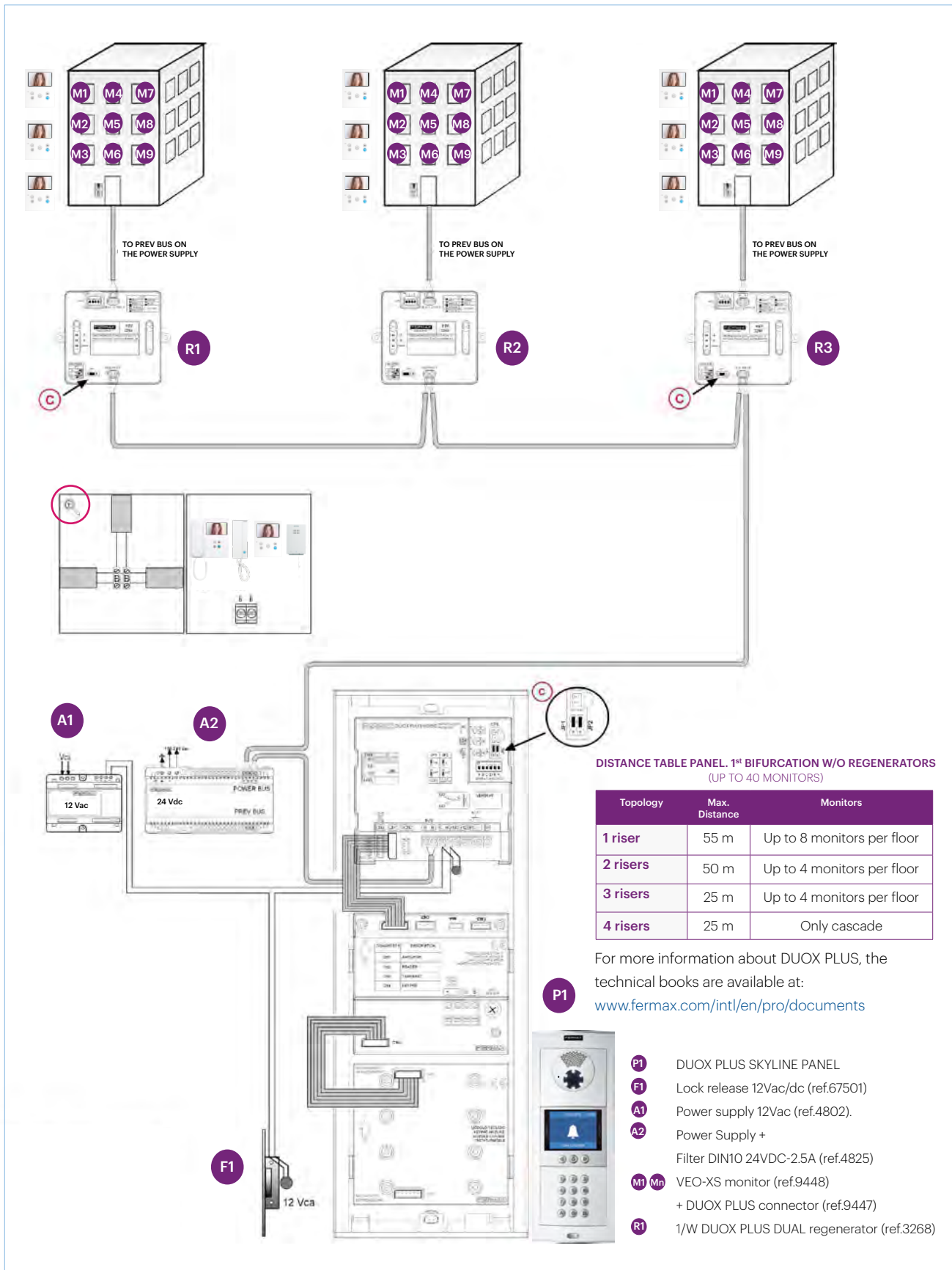
## DUOX PLUS VIDEO DIAGRAM

### 1 ACCESS WITH SKYLINE PANEL TO 4 RISERS OF 6 APARTMENTS IN SERIES



## DUOX PLUS VIDEO DIAGRAM

### 1 ACCESS VIDEO DUOX PLUS TO 5 INTERIOR BLOCKS



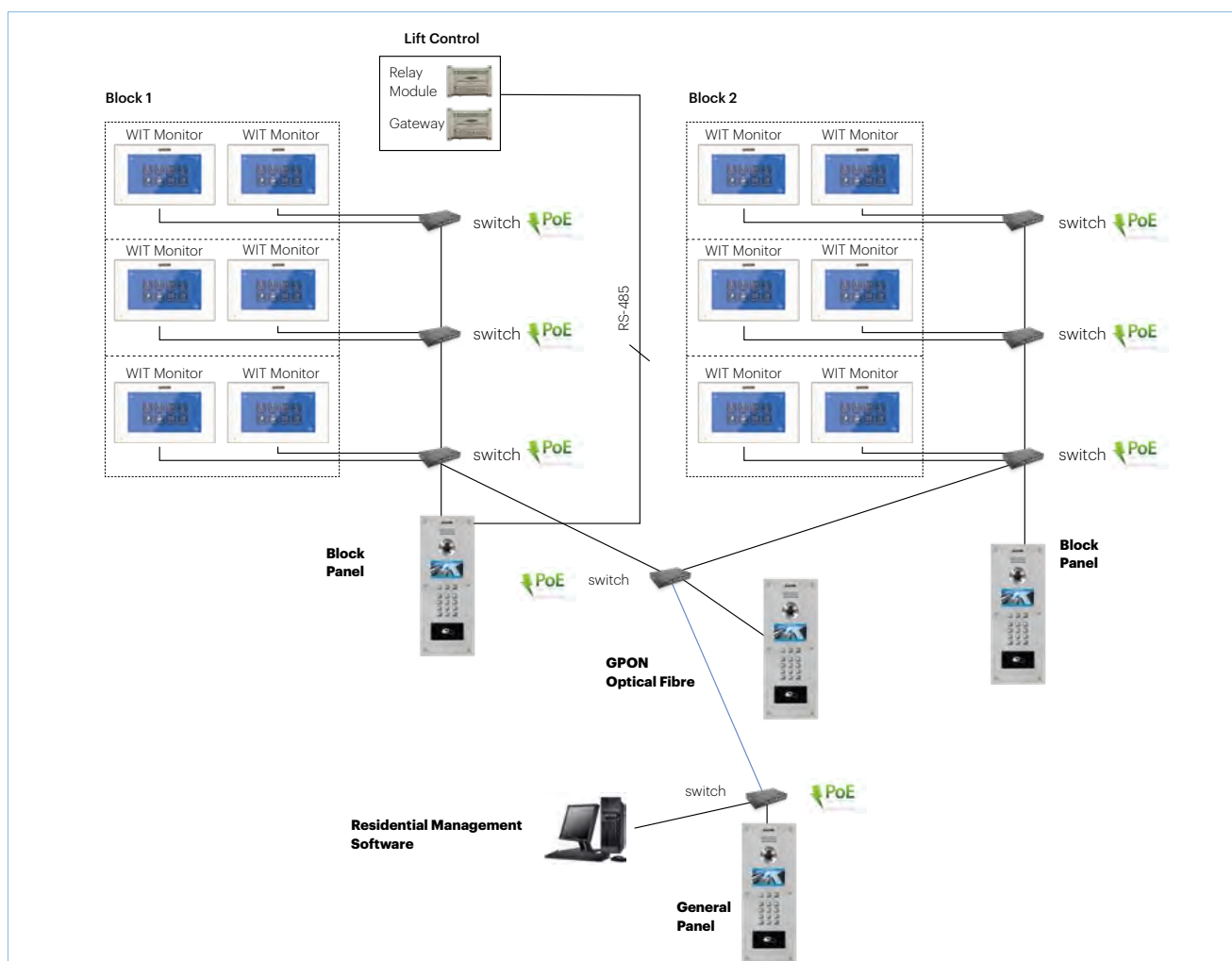
# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

## MEET PANEL FEATURES

GENERAL FEATURES	KIN PANEL REF. 1445	MARINE MEET PANEL REF. 1455	MILO PANEL REF. 9531,9532,9533,9534,9535
<b>Panel</b>	Capacitive Touch Screen	Digital panel with backlighted mechanical keypad.	Digital panels with capacitive touch keypad or mechanical keypad. 1 way push button panels.
<b>Finish</b>	Aluminium	Stainless steel	Aluminium
<b>IP</b>	IP 54	IP 54/IK09	IP 54
<b>Operating temperature</b>	-40°C to 70°C		-20°C to 60°C
<b>Installation mounting</b>	Flushed or Surface		
<b>Installation adjustment</b>	Flush box with adjustable screws or surface with surface box		
<b>Ledge on the wall (flush mounted)</b>	8mm		
<b>Fixing screws</b>	Not visible	Visible security screws (Inox)	Not visible
<b>Electronic calling directory</b>	Yes	Yes	No
<b>Low-lighting vision</b>	0,5 Lux		
<b>Camera resolution</b>	1,2 Mpx (Digital Panel) 1 Mpx (1/W Video Panel)		
<b>Sends video to recorder</b>	Yes - Continuous RTSP IP stream		
<b>Aerial camera display</b>	Up to 4 cameras RTSP IP		
<b>Camera View Angle</b>	105°H 55°V	128°H 70°v	72°H 54°V
<b>Opening secondary doors</b>	Yes, using module ref.1491 in digital panels and 1490 in MILO 1L panels		
<b>PIN code</b>	Up to 8 PIN codes per panel for door opening		
<b>Face Recognition</b>	Up 10.000 users		Up to 6.000 users in digital panels

## MEET DIAGRAM





## MEET MONITORS FEATURES

GENERAL FEATURES	NEO 7” 14501	7” WIT 14701	10” WIT 14811
Technology	MEET Full IP		
Mounting	Surface		Flush/Surface
Hands-free communication	Yes		
Optional communication: press-to-talk	No		
Inductive loop version	No		
Screen	7”		10”
Screen Resolution	800 x 480	1024 x 600	
Capacitive MENU push button	No. Direct access to menu when touching the screen		
F1 Quick-access function push button	No		
Status Led Notification	Yes. Missed Call. Message. Do not disturb		
PROGRAMMING AND TECHNICAL FEATURES			
Programming modes	On screen menu or web server		
Address Assignment	Static IP + apartment number		
PoE	Yes		
Codecs	G.711, H.264		
FEATURES			
Picture capture when the visitor calls	Yes, up to 64 pictures. Automatic or manual capture.		
Memory photo download in SD Card	Yes v2.1 in MIO and WIT monitors		
Guard Unit call	Yes		
Selection of Guard Units	Yes		
SOS Call to Guard Unit	Yes. SOS icon.		
Analogue SOS push button connection	Yes		
Tamper-proof system	Yes		
Auto-switch on of panel	Yes		
Visualization of IP video surveillance cameras	Yes, up to 8 via RTSP		
Internal Intercom	No		
Apartment to apartment intercom	Yes (v3.0) Up to 9 terminals in the same house		
Monitor to monitor messaging	No		
Receive/send messages from/to GU or management software	Monitor can receive messages from the Management Software		
Remote relay activation	Yes, up to 8 (ref.1616)		
Lift Control activation	Yes		
Door bell connection	Yes		
IP CCTV door bell link	Yes via RTSP		
Audio notes	No		
Call extension module	No. 10 Vdc output on alarm triggering		
Doormatic	No		
KNX Home Automation integration	Yes. v2.1 or higher through APPs. Gateway ref.9861.		
Alarm management	7 zones + Tamper		
CONTROLS			
Date and time	Automatic or manual		
Selection of melodies	Yes		
Different melodies based on call source	Yes		
Call volume control	Yes		
“Do Not Disturb” function	Yes		
Conversation volume control	Yes		
Brightness, contrast and colour control	Yes		

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

Visit our technical Youtube channel to solve your questions about DUOX PLUS products:  
[www.youtube.com/user/TecnicoFermox](http://www.youtube.com/user/TecnicoFermox)

## VDS VIDEO KITS FEATURES

**PL<sup>2</sup>**  
**Plug&Play**

**Technology**  
 ⚡ 5 / UTP CAT 6 3+coax



VDS VIDEO KITS	VEO KIT 9411/9412
OUTDOOR PANELS	
Finish	Aluminium and chromed zamak
Mounting	Flush mounted
Output +12Vdc for lock release	Yes
Recommended lock release	Normal lock release with unlocking and adjustable latch 990ND-P22 MAX (ref.67511)
Free potential contact	Yes
Voice synthesiser ("The door is...")	Yes
Integrated access control	-
Accessibility icons	-
IP/IK	IP43 IK07
Panel dimensions (mm)	130x128
Flush box dimensions (mm)	115x114x45
MONITOR	
Communication mode	With handset
Screen	4,3" (16:9)
Flush mounted possibility	-
Push buttons	Mechanical
Auto-on	Yes
Melodies	4
Contrast control	Yes
Volume control and Do not disturb function	Yes
Doormatic	-
Door bell	Yes
Additional functions	2 (F1, F2)
Audio/Video call forwarding to smartphone	Yes (required ref. 3266 WIFI VDS CALL DIVERT WI-BOX. One unit per home)
Compatibility with telephone interface	Yes
Compatibility with aerial cameras	Yes
Dimensions (mm)	200x200x44
Decorative frame	ref.3389 (210x240)

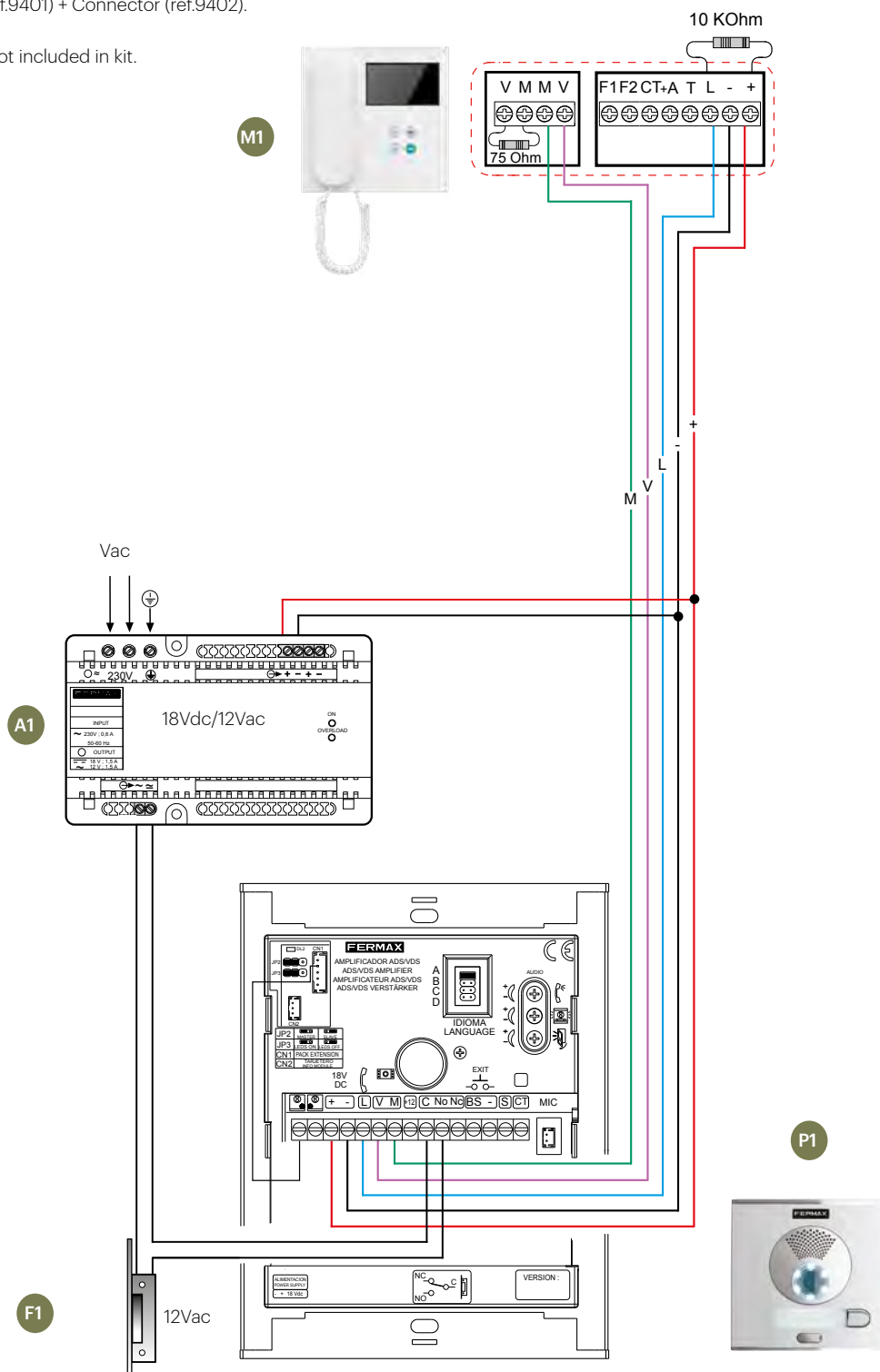
Dimensions: (width) x (height) x (depth) mm.

## VDS VIDEO KITS DIAGRAM

### VDS VIDEO KIT. (REF.9411). INSTALLATION: 5 WIRES/UTP CAT5

- P1** CITYLINE KIT outdoor panel.
- F1** Lock release 12Vac/dc (ref.67511)\*.
- A1** Power supply 18Vdc/12Vac (ref.4810).
- M1** VEO monitor (ref.9401) + Connector (ref.9402).

\* Lock release not included in kit.



# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

## VDS MONITORS FEATURES

GENERAL FEATURES	9401
Technology	VDS (3+coax or 5 wires)
Audio/video	Audio/Video Colour
Mounting	Surface (connector ref.9402)
Desktop support	Yes (ref.9410). Request connector.
Handset with magnet to facilitate the hang up	Yes
Hands-free communication	-
Optional communication: press-to-talk	-
Inductive loop version	Yes (request separately VEO handset ref. 3443).
Screen dimensions	4,3" (Format 16:9)
Screen resolution (H x V)	480 x 272
Colour of the product	White
Number of push buttons	4
Type of push buttons	Mechanical (silicone)
Status led notifications	1
TERMINAL ADDRESS PROGRAMMING	
From monitor	-
From the outdoor panel or guard unit	Yes
From the outdoor panel throughout the apartment door bell	-
FEATURES	
Automatic images capture when the visitor calls	-
Guard unit call	Yes (by means of the door release button)
Auto-on	Yes (up to 2 panels) and aerial cameras
OSD menu on screen	-
Push button for additional function (F1)	Yes (sends a negative)
Push button for additional function (F2)	Yes (sends a negative)
Door bell	Yes
Connection for additional devices (call extension, light/ buzzer activator, etc.)	Yes
Doormatic (automatic door release for offices, etc.)	-
Audio/Video call forwarding to smartphone:	Yes (required ref. 3266 WIFI VDS CALL DIVERT WI-BOX. One unit per home)
CONTROLS	
Date and time	-
Ring tone selection	Yes (4)
Call volume control	Yes (2 levels, 3 positions switch: high, medium, OFF)
"Do not disturb" function	Yes (3 positions switch: high, medium, OFF)
Conversation audio volume control	-
Brightness, colour and contrast control	Yes (by sliding controls)
TECHNICAL FEATURES	
Product dimensions (width x height x depth) mm	200 x 200 x 23 (44 with handset)
Time to answer or open the door since the call is done	30 s.
Conversation time	90 s.
Conversation privacy	Yes
Voltage	18Vdc
Maximum consumption (mA)	400
Standby consumption (mA)	12
Operating temperature (°C)	[-5°C, +40°C]
Humidity	[0%, 90%]
Product weight (kg)	0,59
Connections	V, M, M, V, F1, F2, Ct, +A, T, L, -, +



## VDS MONITORS FEATURES

GENERAL FEATURES	6545	6550	6575
Technology	VDS (3+coax or 5 wires)		
Audio/video	Audio/Video Colour		
Mounting	Surface: order connector ref.6565.		
Desktop support	Yes (ref.6566)		
Handset with magnet to facilitate the hang up	-		
Hands-free communication	Yes		
Optional communication: press-to-talk	Yes		
Induction loop version	-		
Screen dimensions	3,5" (Format 4:3)	7" (Panoramic 16:9)	
Screen resolution (H x V)	320x240	800x480	
Touchscreen	-		Yes
Colour of the product	White		
Number of push buttons	4+4		4
Type of push buttons	Capacitive (touch)		
Status led notifications	4+4		4
TERMINAL ADDRESS PROGRAMMING			
From monitor	From OSD menu		
From the outdoor panel or guard unit	Yes		
From the outdoor panel throughout the apartment door bell	-		
FEATURES			
Automatic images capture when the visitor calls	-		
Guard unit call	Yes (by means of the door release button)		
Auto-on	Yes (up to 2 panels) and aerial cameras		
OSD menu on screen	Yes		
Push button for additional function (F1)	Yes (sends a negative)		
Additional function from screen (F2)	Yes (sends a negative)		
Door bell	Yes		
Connection for additional devices (call extension, light/ buzzer activator, etc.)	Yes		
Doormatic (automatic door release for offices, etc.)	Yes		
Audio/Video call forwarding to smartphone	Yes (required ref. 3266 WIFI VDS CALL DIVERT WI-BOX. One unit per home)		
CONTROLS			
Date and time	Yes		
Ring tone selection	Yes (5)		
Call volume control	Yes (8 levels by OSD menu)		
"Do not disturb" function	Yes (by OSD menu)		
Audio volume control	Yes (8 levels by OSD menu)		
Brightness, colour and contrast control	Yes (by OSD menu)		
TECHNICAL FEATURES			
Product dimensions (width x height x depth) mm	103x172x21 (surface)	185x172x21 (surface)	
Time to answer or open the door since the call is done	30 s.		
Conversation time	90 s.		
Conversation privacy	Yes		
Voltage	18Vdc		
Maximum consumption (mA)	550	650	720
Standby consumption (mA)	25	26	45
Operating temperature (°C)	[-5°C, +40°C]		
Humidity	[5%, 95%]		
Product weight (kg)	0,36	0,61	
Connections	M, Vaux, V, M, M, V, F1, F2, Ct, +A, T, L, -, +		

# TECHNICAL INFORMATION

## TABLES AND DIAGRAMS

### VDS TELEPHONES FEATURES

GENERAL FEATURES	3390	3391	5601
Technology	VDS (3 wires)		
Audio/video	Audio		
Mounting	Surface		
Handset with magnet to facilitate the hang up	Yes		-
Hands-free communication	-		Yes
Optional communication (Press-to-talk)	-		Yes
Inductive loop version	Yes (replace handset for ref.3441 with inductive loop)		-
Colour of the product	White		
Number of push buttons	1	3	3
Type of push buttons	Mechanical		
Status led notifications	-	1 (red ON/OFF)	3 (red, blue and green with different states)
TERMINAL ADDRESS PROGRAMMING			
From terminal	-		Yes
From the outdoor panel or guard unit	Yes		
From the outdoor panel throughout the apartment door bell	-		
FEATURES			
Guard unit call	Yes (by means of the door release button)		
Auto-on	-		Yes
Additional function F1	-	Yes (F1 push button, sends a negative)	
Additional function F2	-	Yes (F2 push button, sends a negative)	-
Apartment door bell differentiated from the outdoor panel	Yes		
Connection for additional devices (call extension, light/buzzer activator, etc.)	Yes		
Doormatic (automatic door release for offices, etc.)	-	Yes (led indication)	
Audio call forwarding to smartphone	Yes (required ref. 3266 WIFI VDS CALL DIVERT WI-BOX. One unit per home)		
CONTROLS			
Melodies selection	-	Yes (2, by a 2 positions switch)	Yes (5)
Call volume control	-	Yes (3 positions switch: high, medium, OFF)	Yes (by sliding wheel)
“Do not disturb” function	-	Yes (3 positions switch: high, medium, OFF)	Yes (by sliding wheel)
Audio volume control	-		
TECHNICAL FEATURES			
Product dimensions (width x height x depth) mm	85x220x40		90x146,5x20
Time to answer or open the door since the call is done	30 s.		
Conversation time	90 s.		
Conversation privacy	Yes		
Voltage	18Vdc		
Maximum consumption (mA)	215		300
Standby consumption (mA)	6		24
Operating temperature (°C)	[-10°C, +60°C]		[-5°C, +40°C]
Humidity	[0%, 90%]		[5%, 95%]
Product weight (kg)	0,29	0,32	0,16
Connections	T,A,L,-,+	T,A,L,-,+,F2,F1	F1,Ab,-A,+A,T,L,-,+

# VDS PROJECT MATERIAL LIST

## VIDEO SKYLINE PANEL

N° APART.	SERIES	FRAME	REF. FRAME	FLUSH BOX	JOINING	CA-BLE	VIDEO COL.	201	202	204	WITHOUT PUSH BUT. V	WITHOUT PUSH BUT. W	POWER SUPPLY	4 WAYS DISTRIBUTOR	VED MONITOR	VED CONNECTOR
					ref. 8829	ref. 2541	ref. 7421	ref. 7376	ref. 7372	ref. 7371	ref. 7442	ref. 7443	ref. 4830	ref. 2449	ref. 9401	ref. 9402
2	S4	3V	7333	8854			1	1					1		2	2
4	S4	3V	7333	8854			1		1				1	1	4	4
6	S5	4V	7334	8855			1	1	1				1	2	6	6
8	S5	4V	7334	8855			1			1			1	2	8	8
10	S6	5V	7335	8856			1	1		1			1	3	10	10
12	S6	5V	7335	8856			1		1	1			1	3	12	12
14	S7	6V	7336	8857			1	1	1	1			1	4	14	14
16	S7	6V	7336	8857			1			2			1	4	16	16
18	S8	7V	7337	8858			1	1		2			1	5	18	18
20	S8	7V	7337	8858			1		1	2			1	5	20	20
22	S9	8V	7338	8882			1	1	1	2			1	6	22	22
24	S9	8V	7338	8882			1			3			1	6	24	24
24	S5	4V	7334X2	8855X2	1	1	1			3			1	6	24	24
26	S6	5V	7335X2	8856X2	1	1	1	1	2	2	1		1	7	26	26
28	S6	5V	7335X2	8856X2	1	1	1		1	3	1		1	7	28	28
30	S6	5V	7335X2	8856X2	1	1	1	1	1	3			1	8	30	30
32	S6	5V	7335X2	8856X2	1	1	1		2	3			1	8	32	32
32	S7	6V	7336X2	8857X2	1	1	1			4		1	1	8	32	32
34	S7	6V	7336X2	8857X2	1	1	1	1		4	1		1	9	34	34
36	S7	6V	7336X2	8857X2	1	1	1		1	4	1		1	9	36	36
38	S7	6V	7336X2	8857X2	1	1	1	1	1	4			1	10	38	38
40	S7	6V	7336X2	8857X2	1	1	1			5			1	10	40	40

\* NOTE: It will require continuous door opener (ref.67501). For AC door openers (Vac), an additional power supply ref.4802 (12Vac / 1A) is required. There are 2 and 4 outputs distributors that can be combined in one installation. They are not necessary in a cascade installation. (See VDS system section); x2 = Request 2 units of the indicated reference.

# TECHNICAL INFORMATION

TABLES AND DIAGRAMS

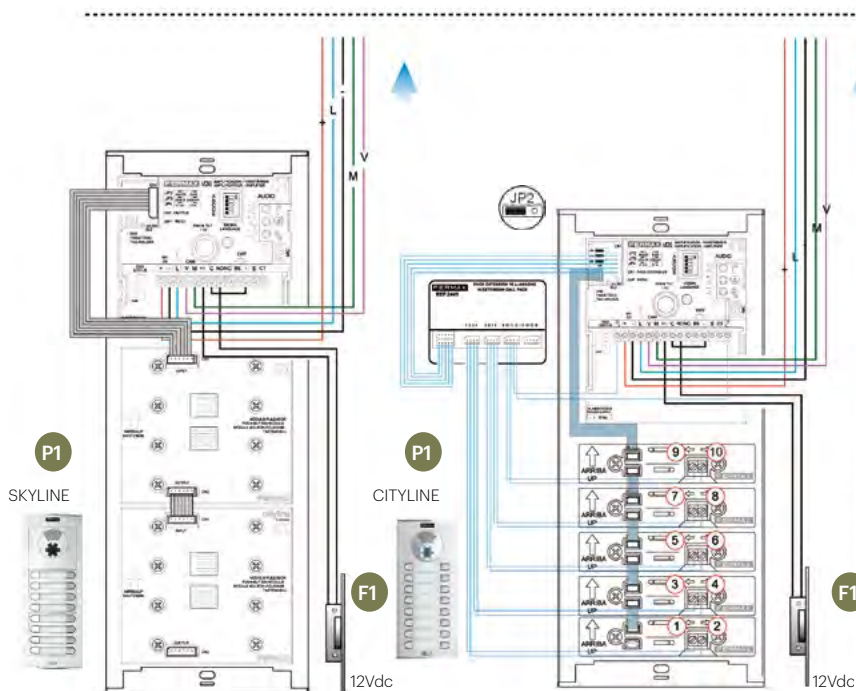
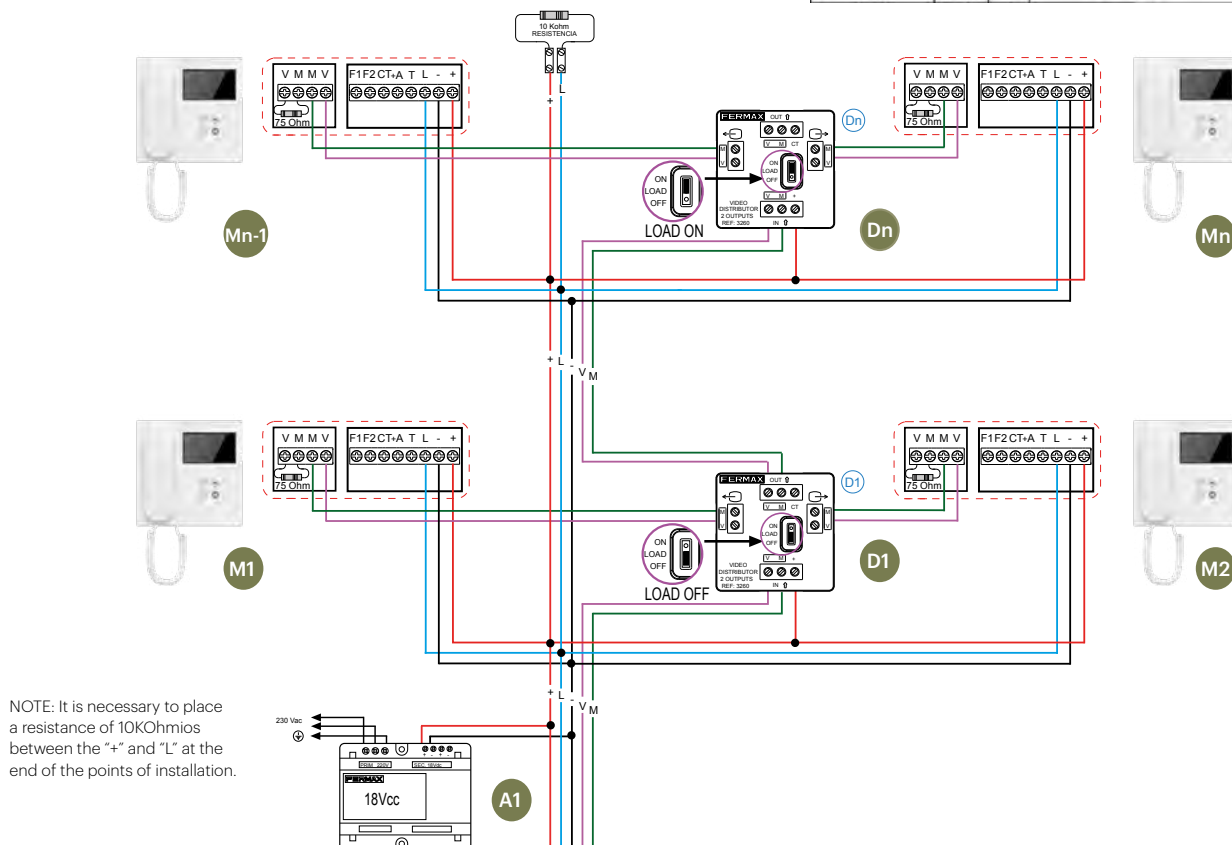
## VDS DIAGRAMS

### VDS VIDEO 1 ACCESS WITH SKYLINE/CITYLINE PANEL. 5 WIRES / UTP CAT5

- P1** SKYLINE/CITYLINE panel.
- F1** Lock release 12Vac/dc (ref.67501).
- A1** Power supply 18Vdc (ref.4830).
- D1** 2/W video Mini distributor (ref.3260).
- M1** VEO monitor (ref.9401)+ VEO connector (ref.9402).

metros	mm <sup>2</sup>	AWG
1 - 50	1 mm <sup>2</sup>	17
50 - 100	1.5 mm <sup>2</sup>	15

UTP CAT5 (AWG 24)





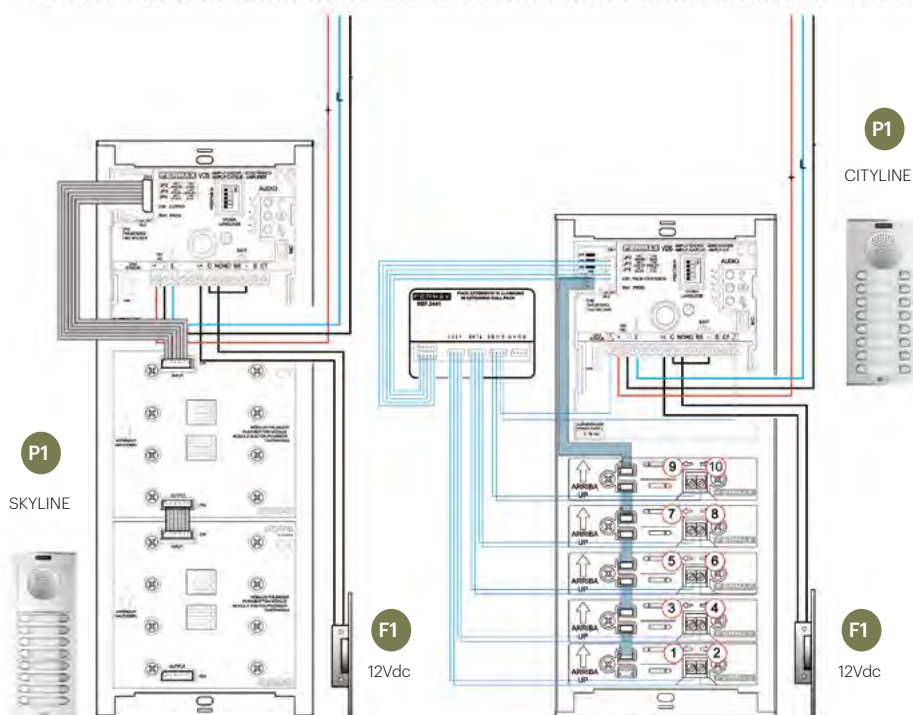
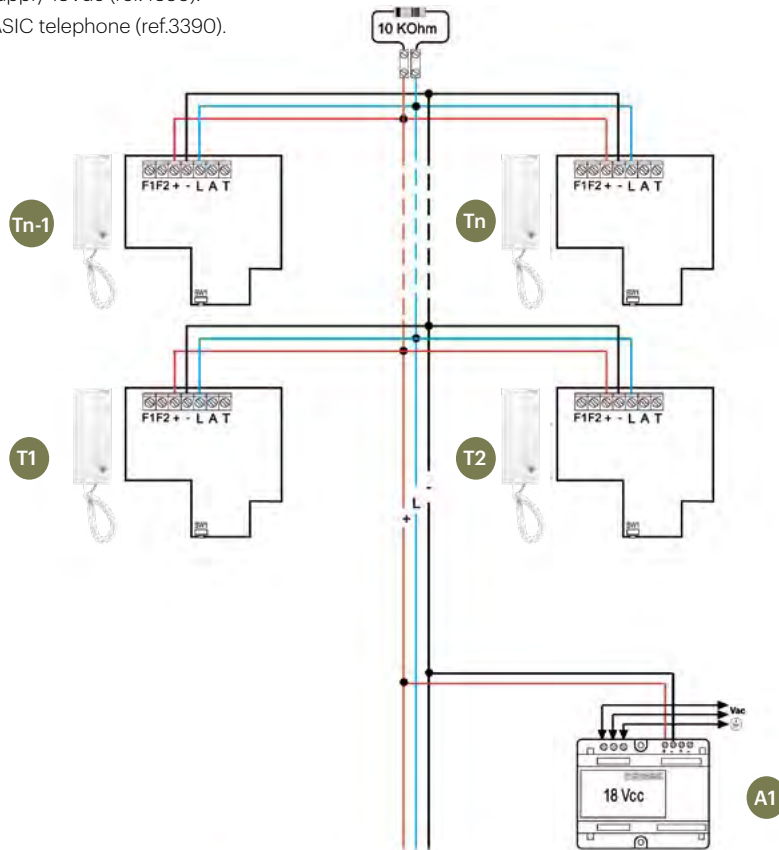
## VDS DIAGRAMS

### VDS AUDIO 1 ACCESS WITH SKYLINE/CITYLINE PANEL

- P1** SKYLINE/CITYLINE panel.
- F1** Lock release 12Vac/dc (ref.67501).
- A1** Power supply 18Vdc (ref.4830).
- T1** LOFT BASIC telephone (ref.3390).

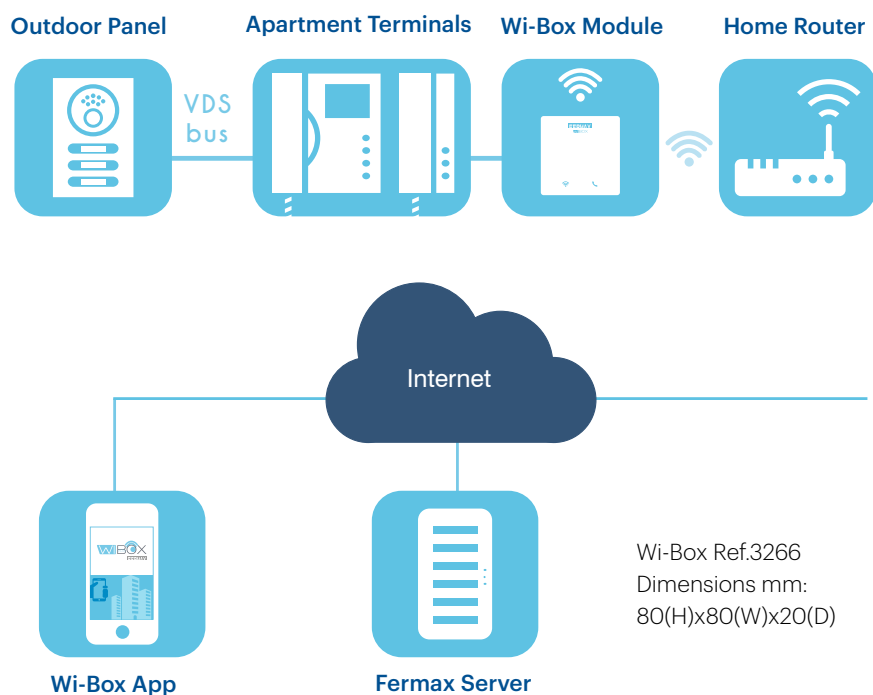
metros	
1 - 50	1 mm <sup>2</sup>
50 - 100	1,5 mm <sup>2</sup>
100 - 200	2,5 mm <sup>2</sup>

NOTE: It is necessary to place a resistance of 10 kOhm between the "+" and "L" at the end of the points of installation.



# TECHNICAL INFORMATION

## TABLES AND DIAGRAMS



## WI-BOX VDS MODULE

GENERAL FEATURES	3266
Technology	VDS (3+coax, 5 wires, UTP CAT5)
Audio/video	Audio/Video
Set-up (Installation)	Surface mounted. It can be screwed to the wall or on a standard electrical mounting box.
Colour of the product	Matt white
Number of push button	2 (PB1: user push button; PB2: installer push button)
Kind of push button	Mechanical
Number of leds for lighted indications	2 tricolour leds: Call divert status (right: PWR LED). WiFi status (left: WIFI LED).
Compatibility with VDS terminals	All VDS terminals that can call the concierge unit.
Compatibility with outdoor panels and concierge units	VDS & MDS (by means of MDS/VDS decoder ref. 2409)
TERMINAL ADDRESS PROGRAMMING	
From the terminal	WI-BOX PB2 push button. Door opening push button standby (concierge call)
SETTINGS	
Divert call ON/OFF	Yes, by means of the user pushbutton PB1
Volume control of audio towards the outdoor panel	Yes (throughout a potentiometer)
TECHNICAL FEATURES	
Product dimensions (width x height x depth) mm	80 x 80 x 20 mm. // 3,14 x 3,14 x 0,78 inch
Connectivity	WiFi (2,4 Ghz)
Date and time	Autonomy 24h without power
Voltage	18 Vdc (directly powered from the VDS terminal)
Maximum consumption	2.7 W
Standby consumption (paired and connected)	1.8 W
Working temperature (°C); Humidity	[-5°C, +40°C]; [0%, 90%]
Product weight (kg) 0.098	0.098
Line adaptor	Yes. A 75 Ohm resistor is included to adjust the video
Connections	Cable with molex connector: +, L, -, V, M, Ct, F1

APP FOR SMARTPHONES	
Compatible devices	Only smartphones (iOS>=10; Android>=5)
Connectivity	WiFi and 3G/4G
Pairing of the WI-BOX with the wifi router of the house	By means of a QR code
Maximum number of apartments that can be managed from the App	No limit
Maximum number of smartphones where call divert from the same house can be used	No limit
Maximum number of users that can be invited by the administrator	No limit
Selection of features by the administrator for the invited users	Calls reception; concierge call; F1 activation and door opening
Calls reception	Audio and Video from the panels/concierge units. With preview before activating audio communication
Time to accept the call since it is produced	30 s.
Conversation time	90 s
Conversation privacy	Yes
Mute	Yes
Video off (frame rate setting)	3 levels: 25 fps, 10 fps, 0.1 fps. To reduce the data consumption when in 4G
Switching of outdoor panels/cameras	Yes. F1 button with programmable time. Protected by PIN code (1-6 digits)
Auto-on	Yes. Like in the VDS monitors
Activate additional feature (stair light relay, second door, etc.)	Yes. Like in the VDS monitors
Door opening	Yes. Protected by PIN code (1-6 digits)
Concierge call	Yes
Calls register	Yes (answered calls in green; missed calls in red)
Settings	Name of the house; Do not disturb; Change password; Ringtone selection and vibration mode; Change the WIBOX Wifi; Time F1; WIBOX Date and Time synchronization
Picture & Video capture	Yes. Photos and Videos manually
Available languages	16 (Spanish, English, French, German, Portuguese, Finnish, Czech, Polish, Dutch, Norwegian, Greek, Danish, Swedish, Hebrew, Russian, Arabic)
Remote update of WIBOX firmware	Yes



### 3266 WI-BOX MODULE

Wi-Box is a small module that allows you to connect one or more mobile phones to your home's VDS monitor or telephone. Just download the App and pair Wi-Box with your WiFi network.

If you want us to tell you about it in a video, scan this code



## MDS FEATURES

### MDS CITY

SINGLE BLOCK		GENERAL ENTRANCE		INTERIOR BLOCK		
Accesses (Nº. Panels)	Apartments	Digital MDS	Direct MDS	Nº. of blocks	Accesses per block (Nº. panels)	Apartments (per block)
5 - 9 <sup>(1)</sup>	50- 99 <sup>(2)</sup>	Accesses (Nº panels)	Accesses (Nº panels)	99	9	50- 99 <sup>(2)</sup>
		See MDS Digital table	See MDS Direct table			

- <sup>(1)</sup> 5 accesses (between audio and video panels) with 1 guard unit and 9 accesses (between audio and video panels) if there is no central unit.
- <sup>(2)</sup> The push button panel is recommended for buildings with less than 50 apartments. Even if at a functional level it allows the number of apartments indicated in the table.
- The MDS City system in single blocks allow to connect only 1 MDS Direct guard unit.

### MDS DIRECT

SINGLE BLOCK		GENERAL ENTRANCE		INTERIOR BLOCK		
Accesses (Nº. Panels)	Apartments	Digital MDS	Direct MDS	Nº. of blocks	Accesses per block (Nº. panels)	Apartments (per block)
5 - 9 <sup>(1)</sup>	99	Accesses (Nº panels)	Accesses (Nº panels)	99	9	99
		Consulting MDS Digital Info.	5 - 9 <sup>(1)</sup>			

- <sup>(1)</sup> 5 accesses (between audio and video panels) with 1 guard unit and 9 accesses (between audio and video panels) if there is no central unit.
- The MDS Direct system allows to connect only 1 MDS guard unit in the whole installation.
- In case of Urbanisations, if the panel/panels is configured as General Entrance, it will be able to establish audio communication with the guard unit.

### MDS DIGITAL








SINGLE BLOCK		GENERAL ENTRANCE	INTERIOR BLOCK
Accesses (Nº. Panels)	Apartments	- Maximum 63 Central Units (General Entrance + Interior Blocks) - Up to 32 accesses (panels/guard unit) x Central Unit - Up to 9.999 apartments x Interior Block Central Unit with LONG call. - Up to 99 apartments x Interior Block Central Unit with SHORT call.	
32	9999		



## 4+N. MATERIAL LIST

## CITYLINE AUDIO PANEL

These panels include the Full or Building Amplifier. See the first page of the 4+N section for additional features over the Basic or Kit amplifier.

CITYLINE PANEL								
Nº APARTMENT	SERIES	PANEL	FLUSH BOX	PANEL	FLUSH BOX	JOINING	POWER SUPPLY	TELEPHONE
						ref.8829	ref.4802	ref.3426
1	S1	70701	8851				1	1
2	S1	70001	8851				1	2
3	S3	70721	8853				1	3
4	S2	70011	8852				1	4
5	S5	70821	8855				1	5
6	S3	70021	8853				1	6
8	S4	70041	8854				1	8
10	S5	70121	8855				1	10
12	S5	70131	8855				1	12
14	S6	70221	8856				1	14
16	S6	70231	8856				1	16
18	S7	70321	8857				1	18
20	S7	70331	8857				1	20
22	S8	71141	8858				1	22
24	S8	71151	8858				1	24
26	S9	71621	8982				1	26
28	S9	71631	8982				1	28
30	S6	70221	8856	7268	8856	1	1	30
32	S6	70231	8856	7268	8856	1	1	32
34	S6	70231	8856	7027	8856	1	1	34
36	S7	70321	8857	7031	8857	1	1	36
38	S7	70321	8857	7040	8857	1	1	38
40	S7	70331	8857	7040	8857	1	1	40

See AUDIO KITS from 1 to 24 lines that include all the necessary material for a complete installation. (See KITS section).

Lock release required in altern (ref.30711).

# TECHNICAL INFORMATION

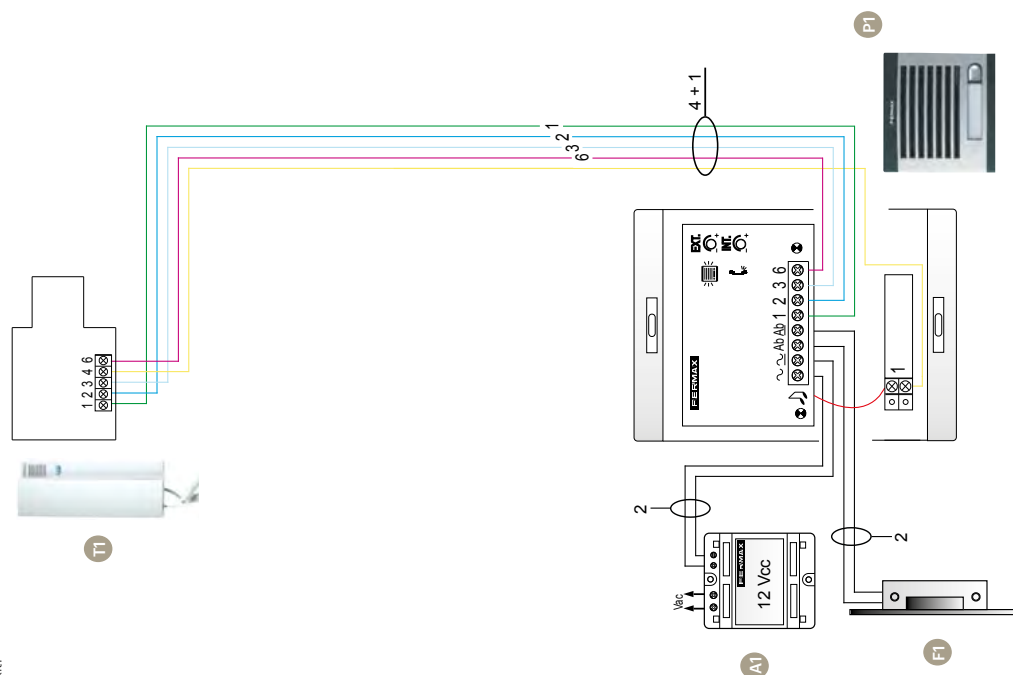
TABLES AND DIAGRAMS

## 4+N DIAGRAMS

### 4+N AUDIO KIT WITH CITY CLASSIC PANEL

- P1** 4+N CITY CLASSIC panel.
- F1** Lock release 12Vac (ref.30711)\*.
- A1** Power supply 12Vac (ref.4802).
- T1** CITYMAX telephone (ref.80447)

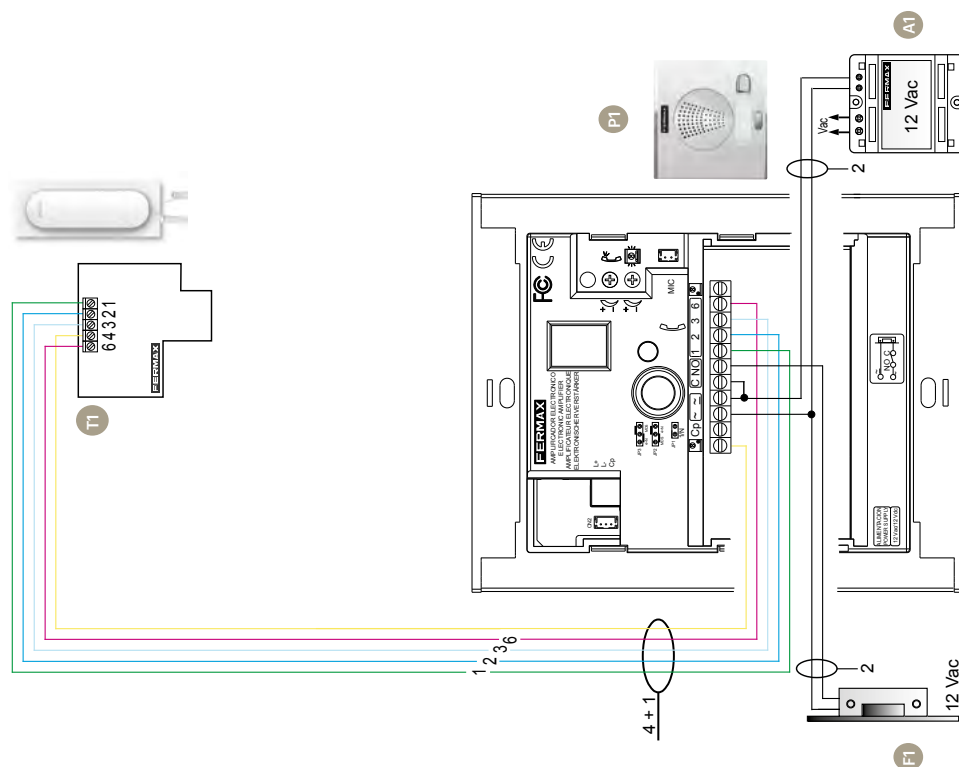
\* Not included in kit.



### 4+N AUDIO KIT WITH CITYLINE PANEL

- P1** 4+N CITYLINE panel.
- A1** Lock release 12Vac/dc (ref.67511)\*.
- F1** Power supply 12Vac (ref.4802).
- T1** VEO telephone (ref.3426).

\* Not included in kit.

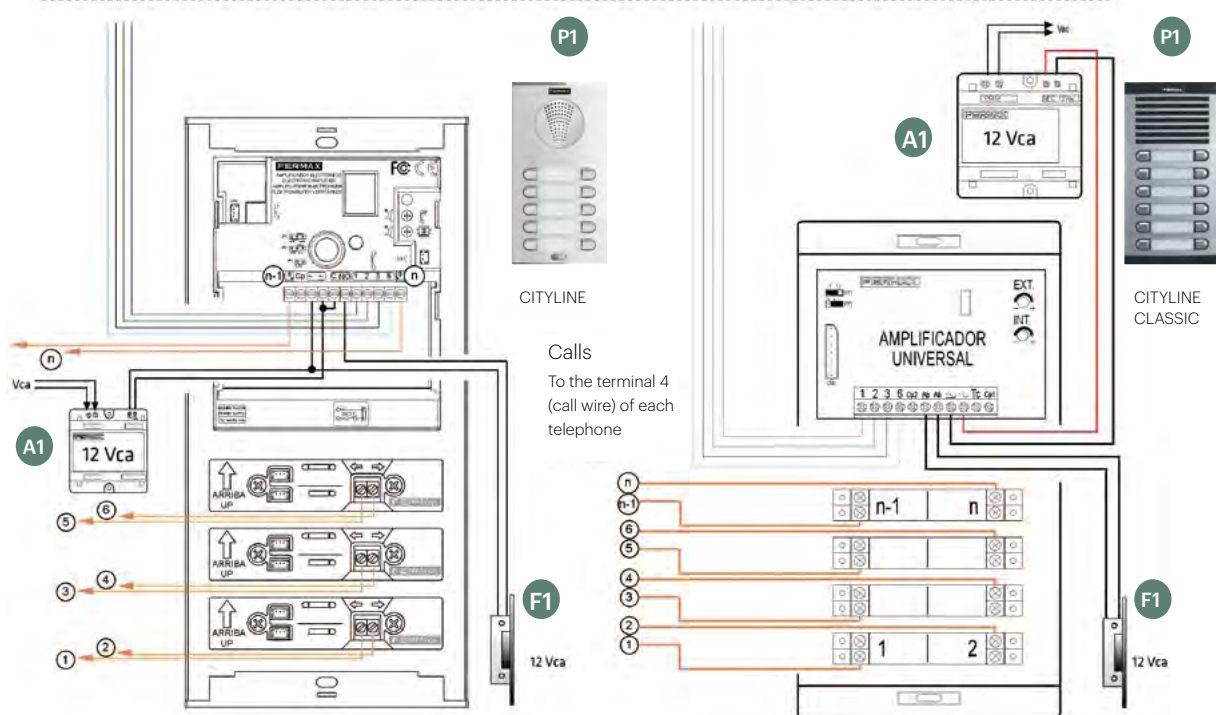
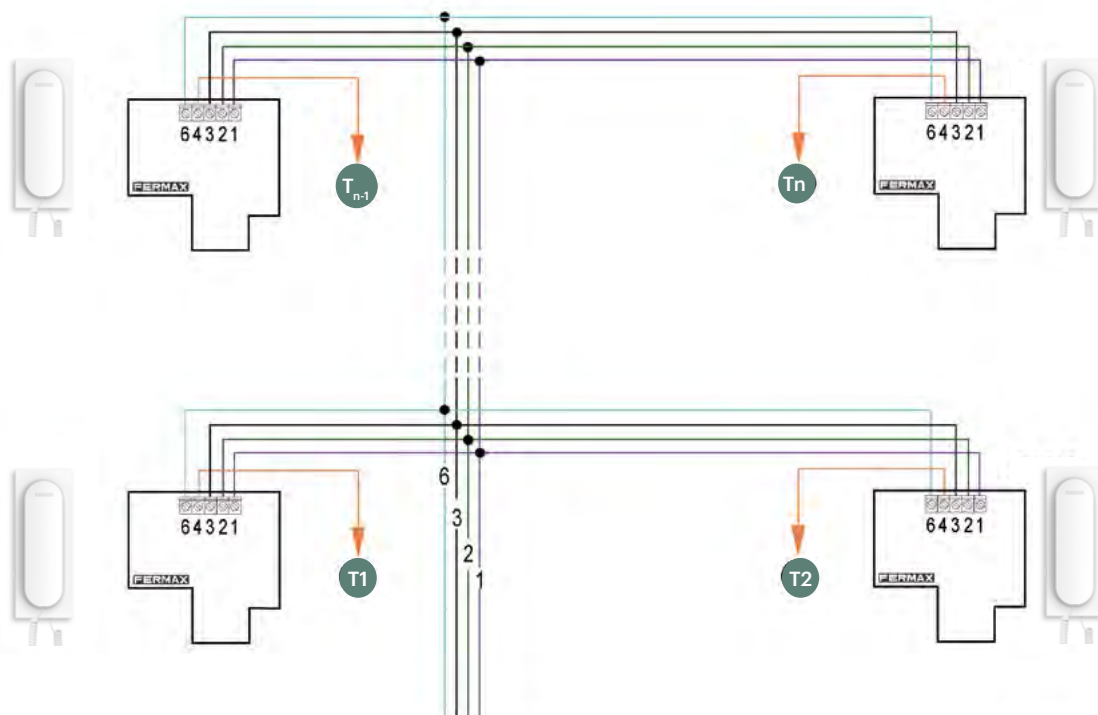


## 4+N DIAGRAMS

## 4+N AUDIO. CITYLINE/CITYLINE CLASSIC

- P1** CITYLINE/CITYLINE CLASSIC Panel.
- F1** Lock release 12Vac/cc (ref.67501).
- A1** Power supply 12Vac (ref.4802).
- T1** VEO telephone (ref.3426).

metros	D		S	
	mm <sup>2</sup>	AWG	mm <sup>2</sup>	AWG
0 - 100	0,5 mm <sup>2</sup>	20	1 mm <sup>2</sup>	17
100 - 300	1 mm <sup>2</sup>	17	1 mm <sup>2</sup>	17

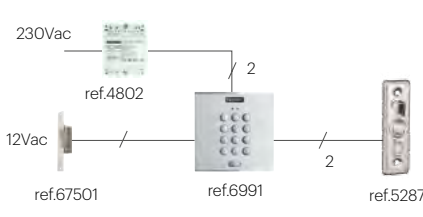




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### KEYPAD

#### STANDALONE

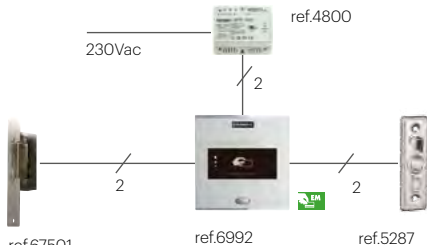
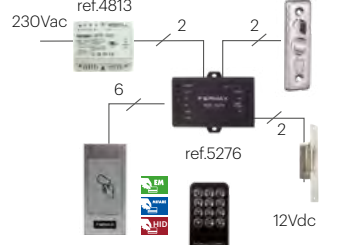
SKYLINE, CITYLINE, MARINE			MINI	RESISTANT
				
7438	6991	4699	5276	5293
Modular	Monoblock	Anti-vandal	-	Anti-vandal
Injected zamak chrome blue backlighted			-	Zamak
Aluminium		Stainless steel	-	Steel
100 codes			1.000 cód./card	600
Flush/Surface (optional)			Surface	
Integrated			External	Internal
Yes				
2 (2A, No/Nc)			1 (2A, C, No, Nc)	1 (2A(C, No,Nc)
Yes				
-			Yes	
-				
2			1	
-			-	
Yes (Add ref.2013)			-	
-			Yes	
Yes			-	
Yes			-	
-			-	Yes
-			-	
-			-	
Yes			-	
Yes			-	
00-99 seg. (00 bistable)			1-99 sec.	
-				
Yes				
Only code			Code, card+code, Card, Code Multicard	
Stand-alone				Auto./Centr.
4 to 6 digits				
105,2x95	130x128	150x180	54x65x9	55x147x20
ref.8852	ref.8948 (included)	ref.4641	-	-
ref.7062	ref.7061	ref.4645	-	-
54/07		54/09	-	66/09
12Vac/cc			12Vdc	12/28Vac/cc
40/110			20/110	25
-			Readers Wiegand26	EM, HID (ISO-ProxII), MIFARE
Keypad 8 bits burst			Wiegand26/4bits	Wiegand26 /4-8bits
[-15°C to 55°C]				[-40°C to 60°C]

\* Bistable: Per each valid identifier, it activates or deactivates the device.



## PROXIMITY

## STANDALONE

SKYLINE, CITYLINE, MARINE			RESISTANT	
				
7440	6992	5472	5276*	5296
Modular	Monoblock	Anti-vandal	-	Compact
Injected zamak chromed blue backlighted			-	-
Aluminium		Stainless steel	-	Metal
400 users			1.000 users	-
Flush/Surface (optional)			Surface	
Integrated			External	
Yes			Yes	
2 (2A, No/Nc)			1 (2A, C, No, Nc)	-
1			2	-
Yes				
Yes (ref.2306)			Yes (includes controller)	
-				
1				
-				
Yes (Add ref.2013)			-	
Yes			Yes	-
Yes			-	
1-99 sec.			1-99 sec.	
00-250sg (as default or disabled)			-	
Monostable (1-99 sec.)			Yes	
Card			Card or Multicard	
Stand-alone/Centralised			Stand-alone	Stand./Central.
105,2x47,5	130x128	150x180	54x65x9	103x48x20
ref.8851	ref.8948 (includes)	ref.4641	-	-
ref.7061	ref.7061	ref.4645	-	-
54/07		54/09	-	66/09
12Vac/cc			12Vdc	
90/110			20/110	35/25
Cards/keyrings EM 125Khz			Readers Wiegand26	Cards/Keyrings EM, HID (ISOProxII), MIFARE (13,56Mhz)
Stand-alone / Data Clock / Wiegand 26 / Prox. MDS-AC+			Wiegand26	Wiegand26
[-15°C to 55°C]			[-15°C to 50°C]	[-20°C to 60°C]

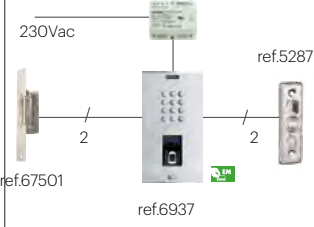

\*Bistable: Per each valid identifier, it activates or deactivates the device.

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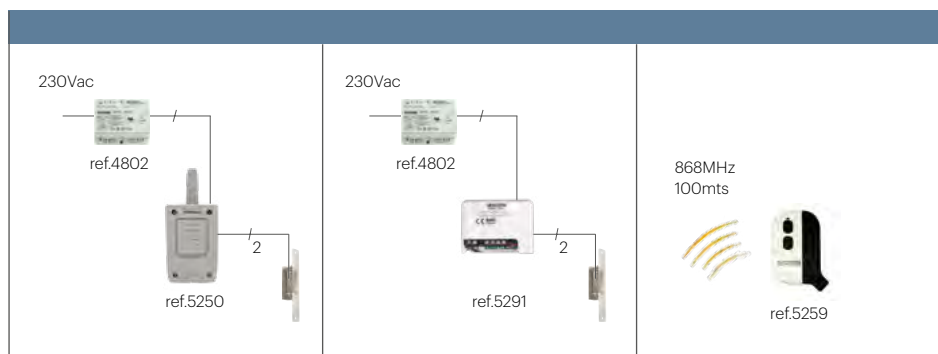
### FINGERPRINT

#### STANDALONE

SKYLINE, CITYLINE, MARINE			CITYLINE	INKEY MINI
				
6936	6935	5482	6937	5233
Modular	Monoblock	Anti-vandal	Monoblock	Monoblock
Capacitive fingerprint reader with integrated EM 125Mhz proximity			Capacitive reader/Injected chromed zamak blue backlighted keypad	Optical reader with integrated 13,56 Mhz MIFARE prox..
Aluminium		Stainless-steel	Aluminium	ABS plastic/Metal
4500 (1 fingerprint) or 2970 (2 fingerprints). Centralised system AC+ 2046 users				5.000 users
Flush/Surface (optional)				Surface
Integrate with Stand-alone / external with Centralised need ref. 4420				Integrate with Stand-alone
Yes				
1 (2A, No/Nc)				1 (No/Nc) requires ref.2013
Yes				
Yes				-
Singular Key (Add ref.24661)				Inkey mini (IP)
1				
Yes				
Yes (Add ref.2013, AUX and +)				Yes (Add ref.2013)
Yes				Yes, via USB
Yes				
Yes				-
Yes				
Yes				
1-99 sec.				
1-99 sec. (as default disabled)				Yes
Monostable				
Fingerprint / card / fingerprint+card		Fingerprint / code / card / fingerprint+code/ fingerprint+card		Fingerprint /card/ fingerprint+card
Stand-alone/Centralised				
-		4 or 6 digits		-
105,2x95	130x128	150x180	130x246	138x48
ref.8852	ref.8948 (included)	ref.4641	ref.8855 (included)	-
ref.7062	ref.7061	ref.4645	ref.7065	-
43/07		43/09	43/07	IP 65
215(12Vac)/150(12Vdc)				12Vdc
118/73				65
Card/Keyring EM 125KHz				MIFARE 13,56 Mhz
-			Keypad 8 bits burst	
[-15°C to 55°C]				

## RADIOFREQUENCY

## STANDALONE



GENERAL FEATURES	5250	5291	5259
Reader types	Basic-2B receiver	Basic MINI receiver	KEYSINGLE MINI emitter
Finish	ABS		ABS
Capacity	500 users		-
Mounting	Surface		-
Controller	Internal		-
Audio and visual notification	Yes		Visual
Doors (relays)	2 (1A, C/No)	1 (3A, C/No)	-
PROGRAMMING			
From receiver	Yes		
FUNCTIONS			
Exit push button	-		
Door sensor	-		
Auxiliary output	-		
SETTING			
Opening time	2 sec.		
Monostable/Bistable*	Monostable (2sec.)/Bistable selectionable in relay 2	Monostable (2sec.)	-
Operation mode	Radiofrequency 868Mhz		
Stand-alone/Centralised	Stand-alone		
TECHNICAL FEATURES			
Dimensions	82x190x40	60x44x18	30x55x10
Environmental protection (IP/IK)	54 (IP65 )	-	
Power supply (V)	12-24Vac/cc		Includes battery 3Vdc CR2032
Consumption (mA) without lock release	60/90	50/100	12
Frequency	868,35Mhz		
Maximum power absorbed	5W		
Radiated power	<25mW		
Distance	100mts		
Codification	High secured changing code. Rolling Code 19 trillion of combinations		
Operating temperature	[-20°C to 85°C]	[-20°C to 55°C]	

\*Bistable: Per each valid identifier, it activates or deactivates the device.

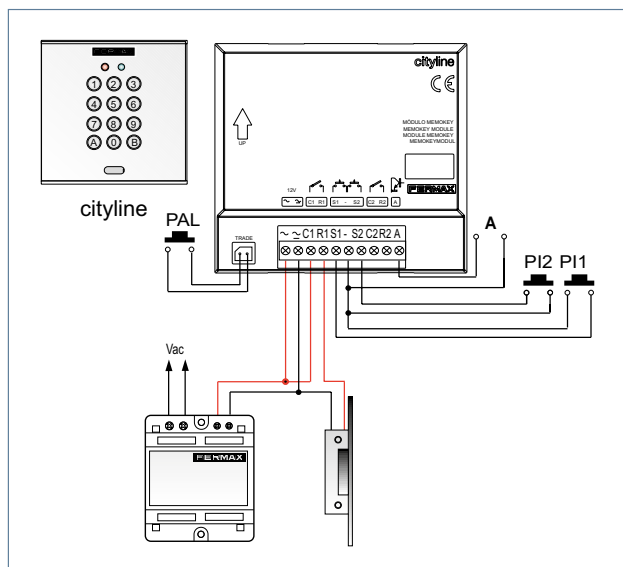
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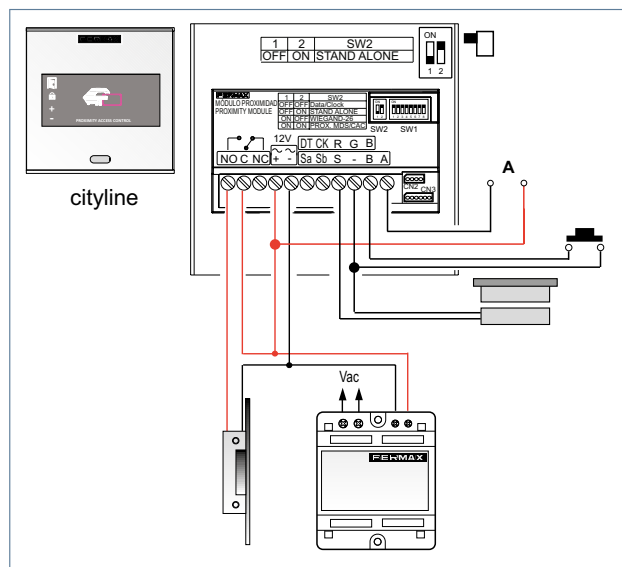
## DIAGRAM. STAND-ALONE ACCESS CONTROL INSTALLATION

### WITH INTEGRATED CONTROLLER

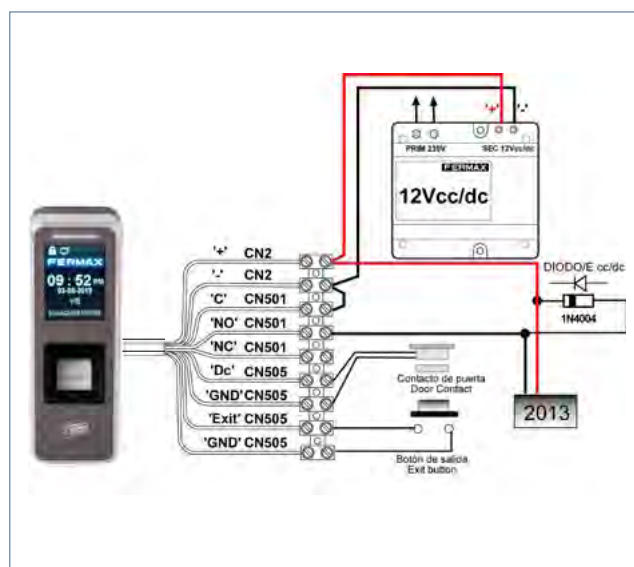
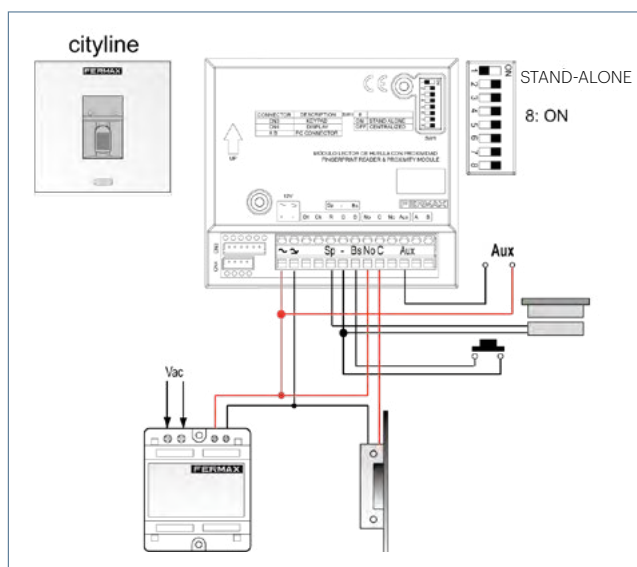
#### KEYPAD



#### PROXIMITY



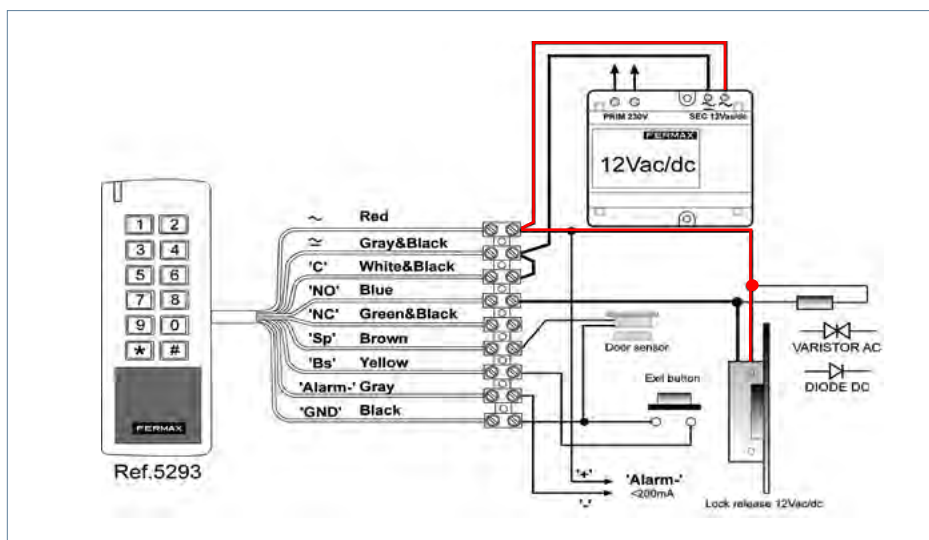
#### FINGERPRINT



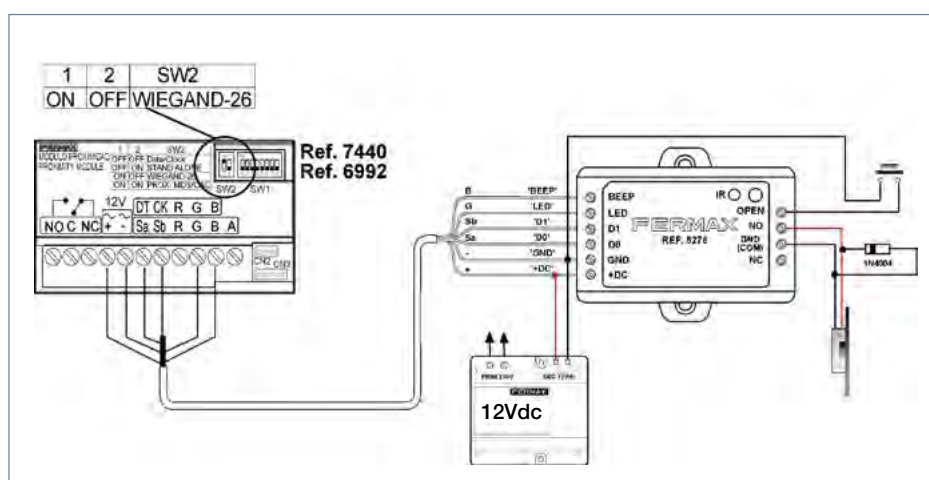


## DIAGRAM. STAND-ALONE ACCESS CONTROL INSTALLATION

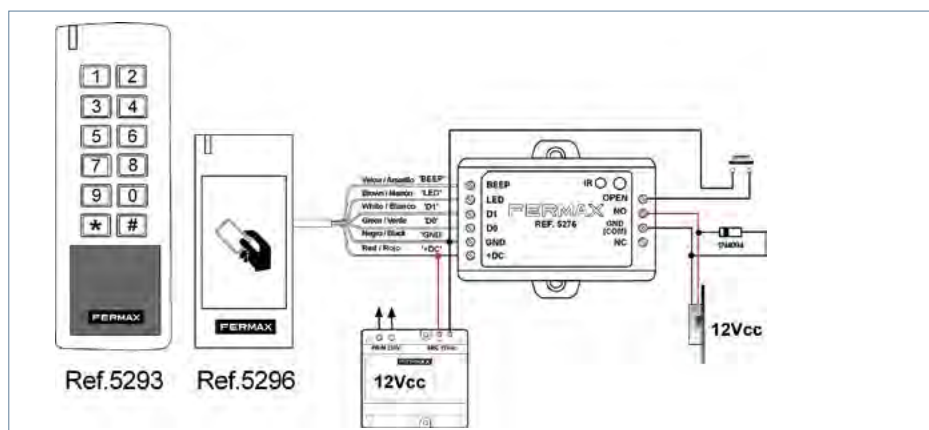
### RESISTANT KEYPAD WITH INTEGRATED CONTROLLER



### WITH EXTERNAL CONTROLLER CITY READER WITH MINI CONTROLLER



### WG READERS



# TECHNICAL INFORMATION

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## PROXIMITY CENTRALISED AC-MAX

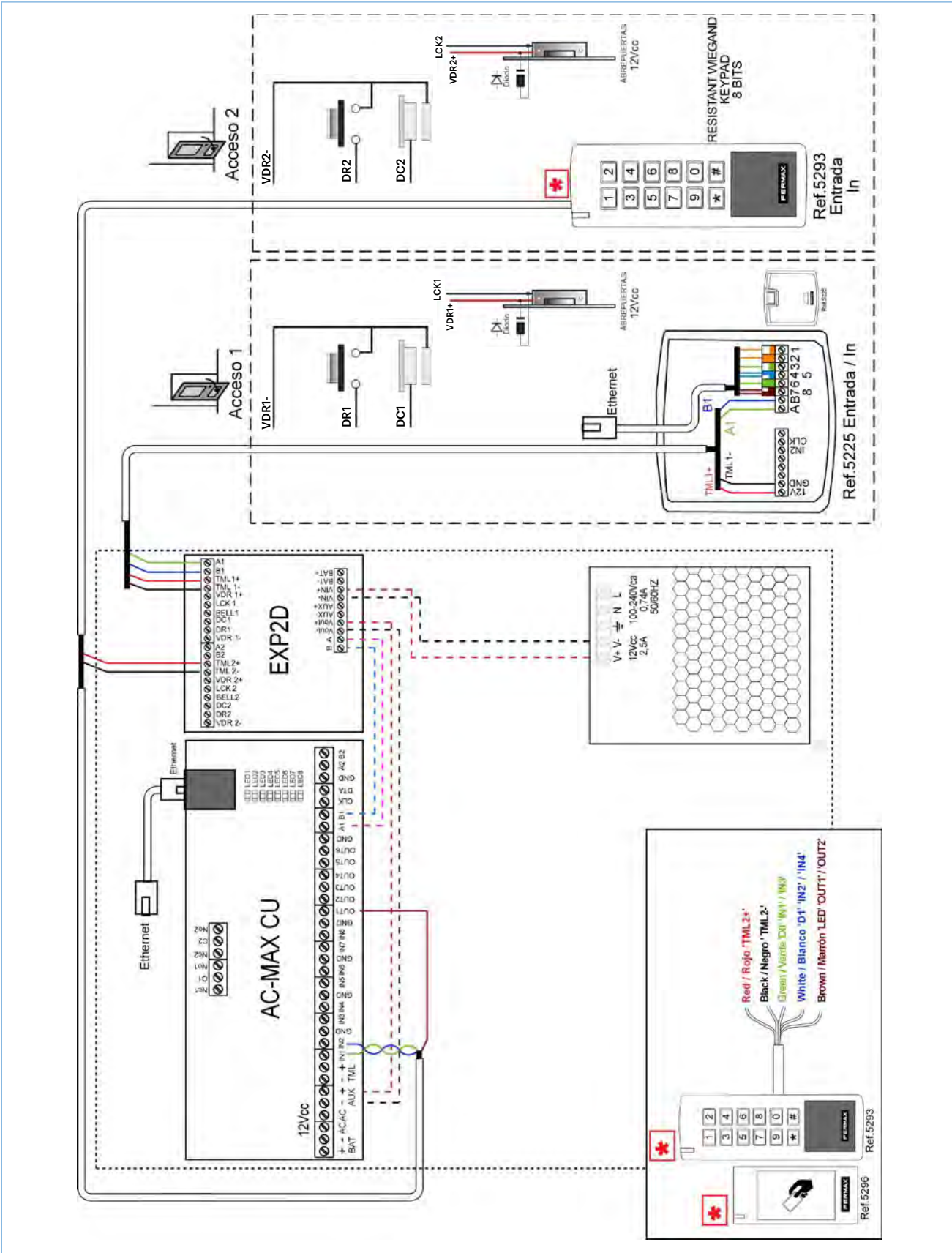
GENERAL FEATURES	7440	6992	5472
Reader type	Modular	Monoblock	Anti-vandal
Keypad type	Injected chromed zamak blue backlighted		
Finish	Aluminium		Stainless steel
Mounting	Flush/Surface (optional)		
Audio/visual notification	Yes		
Operation mode	Card		
PROGRAMMING			
From PC	AC-MAX Software		
TECHNICAL FEATURES			
Reader dimensions	105,2x47,5	130x128	150x180
Flush box	ref.8851	ref.8948 (included)	ref.4641
Surface box	ref.7061	ref.7061	ref.4645
Environment protection (IP/IK)	54/07		54/09
Power Supply (V)	12Vcc		
Consumption (mA) without lock release	90/110		
Compatibility	Cards/Keyrings EM 125KHz/Requires an additional adaptor (ref. 5226)		
Operating temperature	[-15°C a 55°C]		
Terminals	+, -, DO, D1, G, B		

\* The readers ref.7461 and ref.6958 have the same technical features as the reader ref.5296, except for the aesthetics.

## WIEGAND KEYPAD CENTRALISED AC-MAX

GENERAL FEATURES	5191	5190	5192
Reader type	Modular	Monoblock	Anti-vandal
Keypad type	Injected chromed zamak blue backlighted		
Finish	Aluminium		Stainless steel
Capacity	Set by the external controller		
Mounting	Flush/Surface (optional)		
Controller	External		
Audio/visual notification	Yes (depends on the controller)		
Doors (relays)	1 (1A, C/No/Nc)		
Auxiliary relay	No		
Integrated proximity	No		
PROGRAMMING			
From PC	AC-MAX Software		
TECHNICAL FEATURES			
Reader dimensions	105,2x95	130x128	150x180
Flush box	ref.8852	ref.8948 (included)	ref.4641
Surface box	ref.7062	ref.7061	ref.4645
Environment protection (IP/IK)	54/07		54/09
Power Supply (V)	12Vdc		
Consumption (mA) without lock release	70		
Compatibility	-		
Proximity protocol/ keyboard transmission format	4/8 bits burst keypad (selectable by SW1)		
Operating temperature	[-15°C to 55°C]		
Terminals	+, -, DO, D1, G, B		

## DIAGRAMS. CENTRALISED ACCESS CONTROL INSTALLATION







**FERMAX**





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50761	1W DUOX PLUS AUDIO MARINE iLOFT KIT	03	22
50771	1W DUOX PLUS AUDIO CITY iLOFT KIT	03	22
50781	1W DUOX PLUS MARINE OTO VEO-XS WIFI KIT	03	15
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### COMMERCIAL CONDITIONS OF SALE

The present commercial conditions of sale shall be applicable to all sales or deliveries carried out by FERMAX, unless otherwise agreed in writing with the Buyer.

### ORDERS

Orders shall be processed exclusively through authorized distributors.

### DELIVERIES

The delivery dates agreed with FERMAX shall be considered approximate. FERMAX undertakes to do its utmost to comply with the agreed delivery dates, always provided the Buyer facilitates all correct information relating to the order and the delivery with sufficient anticipation.

The delivery term shall be reasonably extended when causes beyond the decision and control of FERMAX prevent to comply with the agreed delivery date.

### ACCEPTANCE OF GOODS

The Buyer shall review and inspect the goods, as to quality and quantity, within the maximum period of five days after the date of delivery.

### OWNERSHIP RESERVE AND RISKS

FERMAX shall continue to be the lawful owner of the Products supplied until the full payment of the agreed amounts.

Notwithstanding the above, the risks inherent to the Products supplied shall be conveyed to the Buyer from the moment the Products are delivered by FERMAX.

### PRICES

Prices do not include any indirect taxes applicable according to the legislation in force from time to time. Other taxes, duties

and charges that must be applied shall be borne by the Buyer, unless otherwise agreed in writing with FERMAX.

### SHIPPING COSTS

Prices established in offers, orders, catalogues and other documents are EXWORKS prices.

Prices do not include the shipping cost except otherwise clearly indicated.

### PAYMENT

Unless FERMAX and the Buyer agreed otherwise in writing, payments shall be made within the periods established by the legislation in force.

FERMAX may require the necessary guarantees to assure that the Buyer complies with all agreed payment terms and conditions, if appropriate considering the financial position of the latter.

### GUARANTEES

FERMAX shall provide guarantee during a period of TWO (2) YEARS following the date of the sale invoice for any original defects in the Products, subject to the terms and conditions established in the legislation in force and in these Commercial Conditions of Sale. This guarantee shall be processed by the Official Technical Services and Official Distributors of FERMAX, regardless the location of purchase.

The Products processed for guarantee that do not comply with the provisions set forth in the previous paragraph shall be treated as out of guarantee. FERMAX reserves the right to apply the appropriate measures to compensate any possible damages caused.

Any deficiencies beyond the control of FERMAX shall be excluded from the guarantee and liability of the latter, specially when they are the result of normal wear, false information provided by the

Buyer, inadequate maintenance, failure to observe the operating instructions, use of any inappropriate material, influence of chemical or electrolytic action or other similar causes.

The guarantee of FERMAX shall be subject to the appropriate compliance with all payment terms and conditions agreed with the Buyer.

### DAMAGES

Under no circumstances shall the Buyer be authorized to make contractual or extracontractual claims for damages deriving from, but not limited to, the loss of production, use, orders, profits, nor for any other direct, indirect or consequential damages.

FERMAX shall be only liable to compensate the client for the costs associated to repairing the deficiencies or incidents occurred during the process of supplying the goods that are attributable to the former.

### RETURNS

All returns of material must attach a Return Authorization Document to be obtained from the Sales Department.

All materials must be in mint condition and include the original packaging before any return is authorized. Depreciations may be applied according to the corresponding policies in force.

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