DUOX plus

It takes 2 to connect

FERMAX

Solutions for buildings.

The only fully digital
system in 2 wires

New version of BLUE
with a completely revamped
technology and ready to allow call
forwarding from our WiFi monitors to
the mobile phones of millions of users
around the world.

A major technological milestone and
a further step towards making the
connected video door entry system a
reality in all homes.

FERMAX

DUOX plus

A system designed for the **professional installer ...**

Wiring **flexibility**

2 NON-POLARISED WIRES

Compatible with a wide variety of wiring.
In retrofit installations, DUOX PLUS can be installed using existing wiring.
Reduced errors, simplified installation on only 2 non-polarised wires.

Simplicity of installation

It saves time during installation and maintenance.

Easy **programming**

Monitors: one person can program the installation in a few seconds directly from the OSD menu.
Panels: digital panels are programmed from the keypad, while on our **pushbutton** panels, the amplifier includes a voice-guided programming system.

Scalable system

For all kinds of projects; large or small, simple or complex, vertical structures or horizontal installations.

Digital transmission

FULL DIGITAL. All information (audio, video and data) is fully digital, ensuring the same audio and video quality throughout the installation.

... and for **the end-user**

Connectivity

Our WiFi video door entry systems open up the world of connectivity to every type of building and home, with call forwarding to mobile phones built into even the most basic monitors.

Accessibility

Adapted and accessible products for everyone, both inside and outside the home.

Security
Photocaller

The video intercom automatically captures an image of the caller on the monitor and on the mobile phone in case of WiFi models.

DUOXplus

It takes 2 to connect

The world's first 100% digital Smart System in 2 wires

2 wires — The most powerful and fastest 2-wire system to install and program.

Installation using existing wiring.

2 communication channels within the same block.

Consistent quality throughout the installation.

Up to 100 blocks and sub-blocks.

Smart accessories for installations of all sizes.

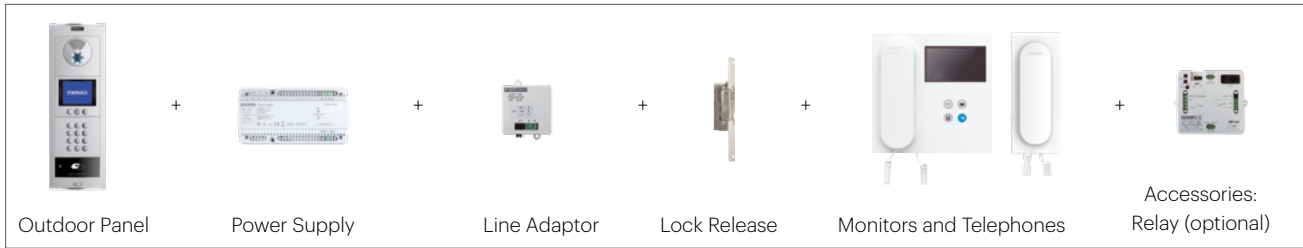Up to 10 panels and 10 guard units at the general entrance.

Up to 10 panels and 10 guard units in each building or block of apartments.

Maximum distance between extremes of the installation: 3.000m.

Maximum point to point distance without regeneration: 500m.

Technology DUOX plus

It takes 2 to connect

Outdoor Panel	+ Power Supply	+ Line Adaptor	+ Lock Release	+ Monitors and Telephones	+ Accessories: Relay (optional)

A simplified 2-wire installation without polarity throughout the entire installation. DUOX PLUS is a highly flexible system that can be **installed with most of the existing cables**. It is a digital system and hence it enables to avoid electrical interferences or analogue noise and maintains the same **optimum audio and video quality throughout the entire installation**, from the first apartment in the project to the most distant one.

The DUOX PLUS system **is installed in the same way for both audio and video**, allowing the users to choose which terminal they prefer to have it at home. Additionally, it is the only **2-wire system that can allow two communication channels in the same block**, i.e. two panels calling two different apartments at the same time. It has a built-in voice guided **programming system in pushbutton outdoor panels** and configuration via **graphic menu in digital panels and monitors**. Its digital technology adapts to all types of topologies and distances, making it possible to successfully install any project: **from small individual buildings to large residential projects.**

All these features make DUOX PLUS the **fastest system to quote, install and program.**
A system that can be perfectly adapted to all situations, both for new construction and retrofit.

FOR ALL TYPES OF PROJECTS WITH LONGER DISTANCES, VERTICAL STRUCTURES OR HORIZONTAL INSTALLATIONS.

Simply add the required number of regenerators depending on the distances.

FERMAX
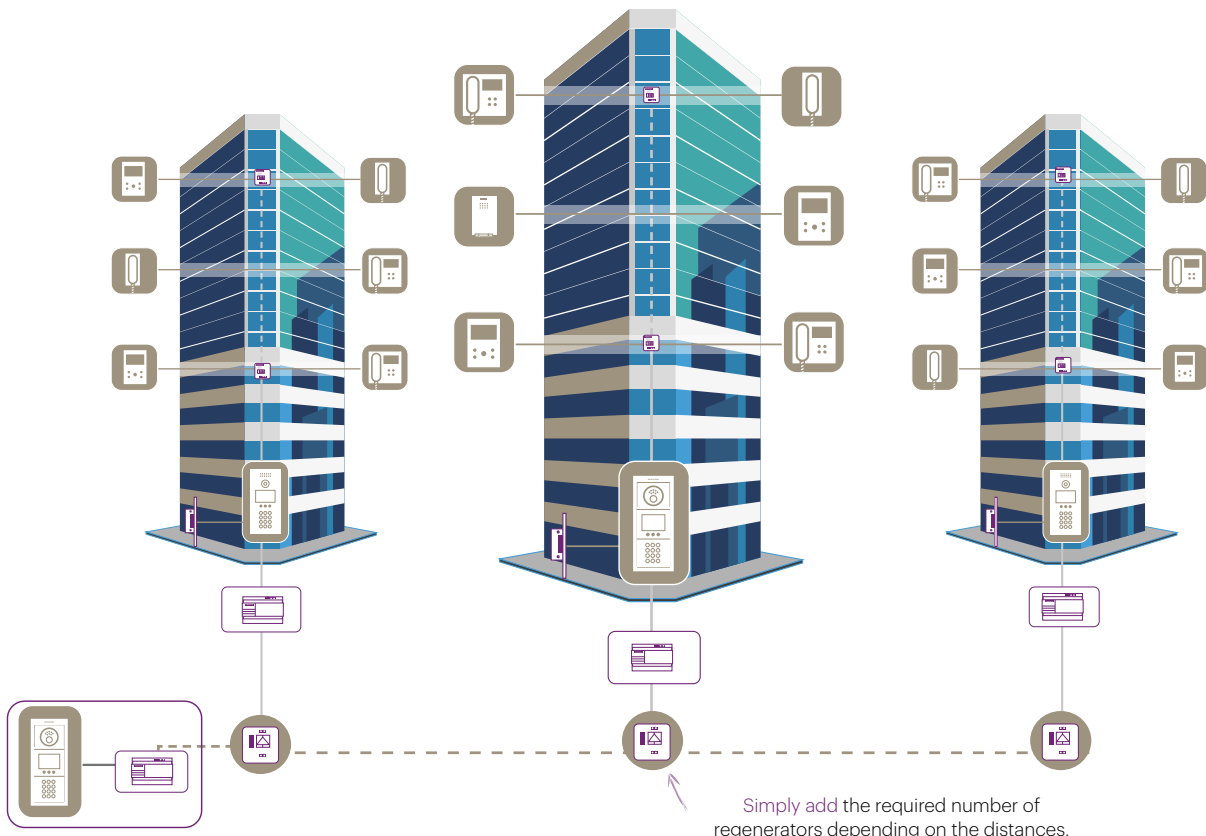
1. Outdoor panel

SKYLINE PANEL

3.5" graphic display on digital panels:
- Display activation by presence sensors.
- Electronic directory agenda of residents.
- Menu-driven configuration from the keypad.
- Information pictograms (One-To-One) with the communication status (calling, in communication, door open, channel busy).
- Upload images, logos and personalised messages.
- Alphanumeric call to apartment.

Keypad:
- The metallic keypad is made of zamak. It has permanent backlighting.
- The keypad can be used to open the door by entering a previously programmed PIN code. The number of different users/codes allowed in the DUOX PLUS system is 10,000.

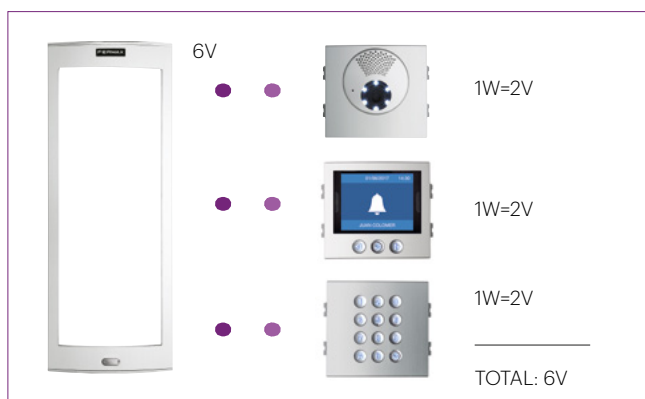|		
Modular panel.	Made in anodised aluminium **(IP43 IK07).**	Chromed zamak pushbuttons and reinforcements.
Wide angle colour camera (Vertical=80º, Horizontal=100º).		Illumination for vision in low-light conditions.

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.

6V

1W=2V

1W=2V

1W=2V

TOTAL: 6V

1

2

SKYLINER
BE CREATIVE

The wizard to create your SKYLINE

FERMAX

Technology DUOXplus

It takes 2 to connect

SKYLINE consists of **9 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	**ref.7332**	**ref.7333**	**ref.7334**	**ref.7335**	**ref.7336**	**ref.7337**	**ref.7338**	**ref.7339**
1V Serie 1	2V Serie 2	3V Serie 4	4V Serie 5	5V Serie 6	6V Serie 7	7V Serie 8	8V Serie 9	9V Serie 10
130x128	130x151	130x199	130x246	130x294	130x341	130x389	130x436,5	130x486

VIDEO AND AUDIO

ref.73911	**ref.73902**
Video W	Audio W

DOUBLE PUSHBUTTONS

ref.7371	**ref.7372**	**ref.7376**
8 PUSH. 2x4 W	4 PUSH. 2x2 V	2 PUSH. 2x1 V

SINGLE PUSHBUTTONS

ref.7367	**ref.7368**	**ref.7375**
4 PUSH. 1x4 W	2 PUSH. 1x2 V	1 PUSH. 1x1 V

INFORMATIVE MODULES

ref.7445	**ref.7444**	**ref.7448**	**ref.7452**
Panoramic cardholder W	Panoramic cardholder V	OneToOne V	OneToOne V with inductive loop

ACCESS CONTROL

ref.7438	**ref.7440**
Memokey keypad W	Proximity V

DIGITAL MODULES

ref.7439	**ref.7470**	+	**ref.7457**
Direct keypad W	Graphic display W		Direct digital keypad W

ACCESSORIES

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

The maximum number of pushbuttons that can be mounted within a single Skyline panel with DUOX PLUS amplifier is 99.

FERMAX

Technology DUOXplus
It takes 2 to connect

Access control modules

ref.7438/5191

KEYPADS

7438	MEMOKEY W		
Authentication: Pin		**Aesthetics:** Cityline	**Users:** 100

Backlighted stand-alone keypad with signal LEDs. It activates the door lock release when a code up to 6 digits is entered. It allows to register 100 different codes that can activate 1 or 2 relays. Power supply 12Vac/Vdc.

5191	WIEGAND SKYLINE KEYPAD	
Authentication: Pin		**Aesthetics:** Cityline

Keypad with Wiegand output for connection to a stand-alone controller ref.5276 or access control system.

READERS

7440	EM PROXIMITY READER V		
Authentication: Proximidad		**Aesthetics:** Skyline	**Users:** 400

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 or a key fob to the module.

7461	SKYLINE WG MIFARE/EM PROXIMITY READER V

Reader with Wiegand output for connection to external controller mini 5276 or access control system.

7463	LECTOR PROXIMIDAD DESFIRE SKYLINE		
Authentication: Desfire	**Aesthetics:** Skyline	**Users:** 400	

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 or a key fob to the module.

2306	PRIVATE PROGRAMMING KEYPAD

Allows to manually deactivate lost identifiers.
Only for ref.7440 PROXIMITY READER EM V.

RF

5291	RF BASIC-MINI RECEIVER

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

PROXIMIDAD
ref.7440/7461/7463

ref.2306

ref.5291

IDENTIFIERS

EM				MIFARE			DESFIRE			RF 868Mhz	
KEY FOB	CARD	BRACELET		KEY FOB	CARD		KEY FOB	CARD		REMOTE CONTROL	
4515	23361	6949		52740	52750		4532	4531		5259	5231

FERMAX

Panel **accessories**

8829	JOINING BOLTS SET

It allows to combine two or more frames. One set is required for each additional frame installed on flush box.
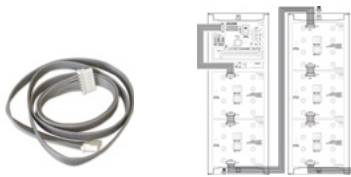
A cable is required per each additional frame in order to connect the pushbuttons modules between both frames (70 cm).

2541	DUOX PLUS/VDS CONNECTION CABLE (6W)
2542	DUOX PLUS/VDS CONNECTION CABLE (5W)

This cable is suitable only for Cityline and Marine pushbutton panels.

	FLUSH BOX	SURFACE BOX	HOOD		MODULAR FRAME*	CITY FRAME		ANGULAR COMPLEMENT
			SIMPLE	DOUBLE		SIMPLE	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
S10	ref.8983 115x471x45	ref.7081 130x486x33	ref.8481 135x488	-	-	ref.8264 225x543	-	ref.8387

* 3 Series only for Cityline
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.

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

FERMAX

CITYLINE PANEL

CITYLINE is a monoblock concept panel. It is characterised by its curved profile.

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

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

3.5" graphic display on digital panels:
• Display activation by presence sensors.
• Electronic directory agenda of residents.
• Menu-driven configuration from the keypad.
• Information pictograms (One-To-One) with the communication status (calling, in communication, door open, channel busy).
• Upload images, logos and personalised messages.
• Alphanumeric call to apartment.

Keypad:
• The metallic keypad is made of zamak. It has permanent backlighting.
• The keypad can be used to open the door by entering a previously programmed PIN code. The number of different users/codes allowed in the DUOX PLUS system is 10,000.

Made in anodised aluminium **(IP43 IK07).**	Chromed zamak pushbuttons and reinforcements.
Wide angle colour camera (Vertical=80º, Horizontal=100º).	Illumination for vision in low-light conditions.

Direct Cityline panel

ref.73631

Panel dimensions: 130x246 (S5)
Flush box dimensions: 115x233x45 (S5)

The DIRECT panels have a keypad to call the apartments.
The keypad admits 1 code to open the door.

73631	DUOX PLUS DIRECT VIDEO CITY PANEL S5

8855	FLUSH BOX S5
8829	JOINING BOLTS SET

NOTE: Recommended to add DIRECTORY SKYLINE PANEL S5 (ref.7334 and 2 units ref.7445).

Digital Cityline panel

ref.73871   ref.73878

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

73811/73812   ref.73818 /73819

Panel dimensions: 130x389 (S8)
Flush box dimensions: 115x375x45 (S8)

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
73812	DUOX PLUS DIG 1W CITY VIDEO PANEL DESFIRE

73878	DUOX PLUS DIGITAL 1/W VIDEO CITY PANEL S7
73818	DUOX PLUS DIGITAL 1/W VIDEO 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 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.

73819	DUOX PLUS DIG 1W CITY VIDEO PANEL DESFIRE

8857	FLUSH BOX S7
8858	FLUSH BOX S8
8829	JOINING BOLTS SET

NOTE: Recommended to add according to the size of the panel:
• DIRECTORY SKYLINE PANEL S7 (ref.7336 and 3 units ref.7445).
• DIRECTORY SKYLINE PANEL S8 (ref.7337, ref.7444 and 3 units ref.7445).

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

FERMAX

MARINE PANEL

3.5" graphic display on digital panels:
• Display activation by presence sensors.
• Electronic directory agenda of residents.
• Menu-driven configuration from the keypad.
• Information pictograms (One-To-One) with the communication status (calling, in communication, door open, channel busy).
• Upload images, logos and personalised messages.
• Alphanumeric call to apartment.

Keypad:
• The metallic keypad is made of zamak. It has permanent backlighting.
• The keypad can be used to open the door by entering a previously programmed PIN code. The number of different users/codes allowed in the DUOX PLUS system is 10,000.

IP65 IK09 vandal-proof door entry panel.
Made in stainless steel, 2.5mm-thick.

AISI 316L
AISI 316L steel, of high quality and resistant to extreme or adverse climatic conditions, wet or corrosive climates.

Wide angle colour camera (Vertical=80º, Horizontal=100º).

Illumination for vision in low-light conditions.

Pushbutton Marine panel

ref.44438
150x180

ref.44338
150x180

ref.44348
150x180

44438	1/W BLACK MARINE DUOX PLUS VIDEO PANEL
44338	1/W MARINE DUOX PLUS VIDEO PANEL
44348	2/W MARINE DUOX PLUS VIDEO PANEL
4641	S1 FLUSH BOX Dimensions: 130x160x55mm
4645	S1 SURFACE BOX WITH HOOD Dimensions: 154x184x96mm
4701	S1 HOOD FOR FLUSH BOXES Dimensions: 184x154x40mm

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

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

FERMAX

Technology DUOX plus

It takes 2 to connect

Digital Marine panel

ref.55261
150X360

ref.5471
150X360

ref.55288   ref.55281

- 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.

55261	DUOX PLUS DIGITAL MARINE VIDEO PANEL ST3
55281	DUOX PLUS DIGITAL MARINE VIDEO PANEL ST3+ PROX
55288	DUOX PLUS DIGITAL 1/W MARINE VIDEO PANEL PROX ST4

In addition to being able to call the main guard unit by pressing the "bellkey", these outdoor panel models also include a pushbutton 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

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

Pushbutton and digital accessories
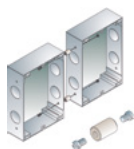
ref.2289

ref.2441   ref.2008

2289	MARINE JOINING BOLTS SET FOR FLUSH BOX

Allows flush-mounted boxes of the same series to be joined laterally. One set is required for each additional outdoor panel.

2441	16 CALL EXTENSION MODULES
2008	8 CALL EXTENSION MODULES

MARINE ELITE door stations with pushbuttons (except for 1 and 2-way door stations), always require a call extension module depending on the number of pushbuttons (ref. 2008 - 8 call extension module, ref. 2441 - 16 call extension module).

FERMAX

Marine Elite panel

UNIQUELY FERMAX. SPECIALLY MADE FOR YOU!

MARINE *elite*
by FERMAX

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

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

Our differentiating proposal to make your projects unique

Colour

Composition

Size

Elite Engraving

• Special formats and dimensions.
• Available in all RAL colours.
• Laser logo or text marking. The engraving is only available on the panels in stainless steel colour.

MANUFACTURING PROCESS OF MARINE PANELS

31728	DUOX PLUS MARINE ELITE PANEL

The following variants are available on request:
- Panel with special formats and dimensions.
- Integration of access control modules and special combinations with amplifier, pushbuttons and other accessories.
- Laser logo marking. The engraving of the panels is only available on steel-coloured panels. Other colours cannot be engraved.
- Engraving of house number and messages.
- Pushbuttons without card holder.
- Backlighting.
- The maximum number of pushbuttons that can be mounted within a single Marine panel with DUOX PLUS amplifier is 99.

4579	MARINE ELITE RAINHOOD (FOR FLUSH MOUNTING)
4580	MARINE ELITE FLUSH BOX
4581	MARINE ELITE SURFACE BOX WITH RAINHOOD

You can find the SPECIAL MARINE application form at: https://fermax.com/intl-en/tools/special-panels

Technology DUOXplus
It takes 2 to connect

2. Monitors and telephones

All monitors are available in standard and WiFi models.

VEO Monitor
4.3" (16:9) colour screen
With handset

VEO-XS Monitor
4.3" (16:9) colour screen
Hands-free
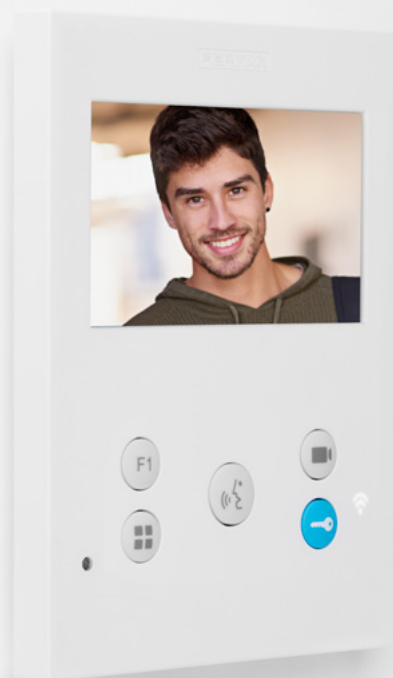
Made of high-impact ABS white plastic.

Silicone buttons.

Surface installation.

Additional configurable functions such as activating second access, courtesy light, etc. (DUOX PLUS relay required).

Colour screen with OSD menu.

Do not disturb function.

Settings: contrast, brightness, colour and volume.

Date and time settting.

Apartment entrance doorbell.

Automatic image capture per call (memory up to 150 photos).

Auto-on: activate the outdoor panel and switch the display to another panel or camera.

Doormatic function (VEO-XS y VEO-XL): Automatic door opening for professionals (offices, clinics, etc.).

The same wall mounting connector is used for all monitor models. This makes the installer's job easier and provides great flexibility, allowing each resident in the building to choose the monitor they prefer.

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

FERMAX

VEO-XL Monitor

7" (16:9) colour screen
Hands-free

Call divert to mobile

All the **WiFi** monitors are equipped with WiFi connection that allows forwarding calls to mobile devices.

The BLUE by FERMAX application allows end-users to manage the functions of the video door entry system and much more directly from their smartphone or tablet.

APP BLUE GRATIS / FREE

All **WiFi** monitors include a sticker with a **QR** code so that end-users can download the **BLUE by FERMAX app.**
They can easily pair their monitor and enjoy the call divert to mobile.

9446	**DUOX PLUS VEO WiFi MONITOR**
9456	**DUOX PLUS VEO WiFi MONITOR WITH INDUCTIVE LOOP**
9445	**DUOX PLUS VEO MONITOR**
9455	**DUOX PLUS VEO MONITOR WITH INDUCTIVE LOOP**
Dimensions: 200x200x23mm (44 mm with handset).	
9449	**DUOX PLUS VEO-XS WiFi MONITOR**
9459	**DUOX PLUS VEO-XS WiFi MONITOR WITH INDUCTIVE LOOP**
9448	**DUOX PLUS VEO-XS MONITOR**
9458	**DUOX PLUS VEO-XS WITH INDUCTIVE LOOP**
Hands-free. Dimensions: 125x165x21 mm.	
9469	**DUOX PLUS VEO-XL WiFi MONITOR**
9479	**DUOX PLUS VEO-XL WiFi MONITOR WITH INDUCTIVE LOOP**
9468	**DUOX PLUS VEO-XL MONITOR**
9478	**DUOX PLUS VEO-XL WITH INDUCTIVE LOOP**
Hands-free. Dimensions: 185x185x21 mm.	
9447	**DUOX PLUS CONNECTOR**
Support for mounting the DUOX PLUS VEO, VEO-XS and VEO-XL monitor on the wall.	

Note: In models with inductive loop, the induction system included in the monitors allows to transform the audio signal into a magnetic field adapted to the hearing aids or prostheses of hearing impaired persons.

FERMAX

Call divert
to mobile/tablet

Free application
BLUE by FERMAX

With the DUOX PLUS WiFi monitors, the **call divert to mobile phones comes as standard.**

It allows to **establish communication with the outdoor panels and open the door.**

It allows to **see who is calling** before answering and **open a second auxiliary door.**

Automatic image capture of the caller and their **register in the call log.**

Up to **8 smartphones/tablets in the same apartment** can receive the call **simultaneously.**

It is as simple as downloading the **BLUE by FERMAX** app from Google Play or the Apple Store.

App functions and menu

Answer/pick up the call

Conversation. Action buttons in conversation:

- Mute. So that you cannot be heard from the outdoor panel.
- Video off. Audio only. To reduce data consumption in 4G mode.
- Change the outdoor panel or camera.
- F1 Activation of an additional function protected by the mobile phone unlocking code: PIN, fingerprint, pattern or facial recognition.
- Door opening: protected by mobile phone unlocking code: PIN, fingerprint, pattern or facial recognition.

End of conversation.

Door opening.

Auto-on.

Call to concierge.

F1 **Additional F1 function.**

Call history.

Home settings.

Image capture.

Home menu.

Smart speakers

NEW

works with Google Home

works with alexa

works with Siri

By connecting to **Alexa and Google Home**, you can receive call notifications from the video intercom on a smart speaker or display.

You can also use **your voice to open the door**, either with smart speakers or displays or with Siri from your iOS device (iPhone, iPad or Apple Watch).

FERMAX

Door opening without the keys

Image capture and call history
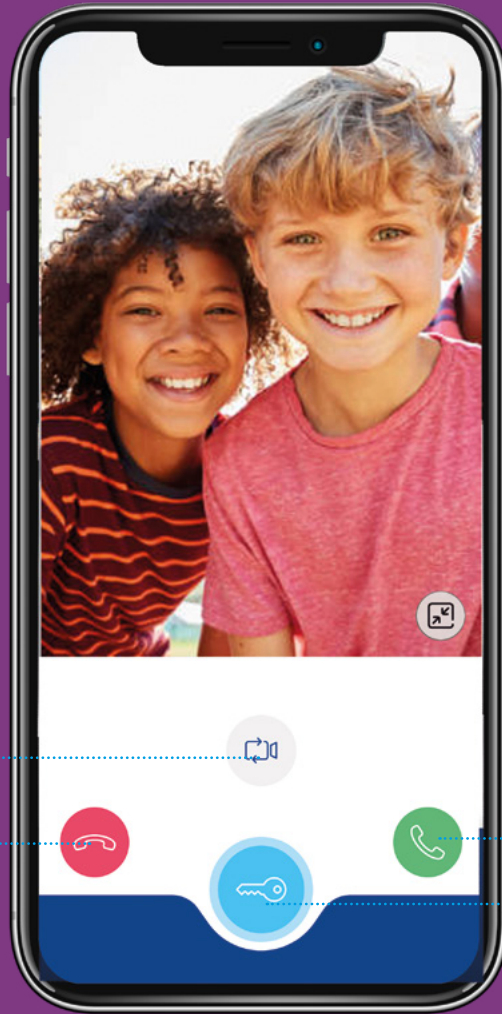
Change the camera

Hang up the call

Change the camera
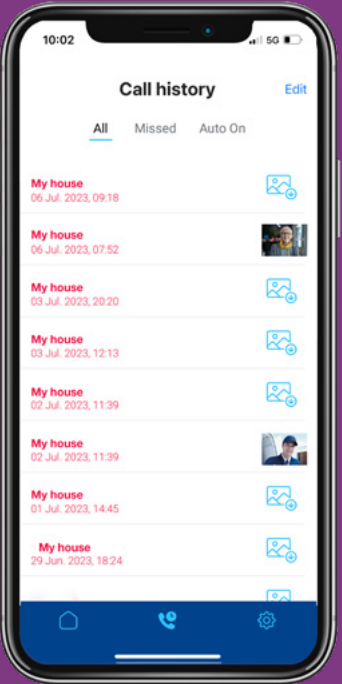
Answer the call

Open the door

More information on
BLUE by **FERMAX**

With the **BLUE by FERMAX** application the end-users can:

Pretend they are at home, even if they are not.

View the entrance camera via the auto-on function without the need of a previous call.

Open the door without the keys.

View the history of missed and received calls, as well as the images captured of the callers.

View other panels connected to your installation, either from the panel or via the camera interface.

Receive all calls from the video intercom on the mobile phone.

Answer and open the door from any location.

Invite their family to use the BLUE app when they require it.

Activate the additional function F1 configured in the video intercom from the mobile phone.

Request a concierge call in the instalation with a DUOX PLUS guard unit.

Telephones

VEO   EXTRA

iLOFT

VEO, LOFT and iLOFT telephones include the following features:

- Door opener button and call to guard.
- 5 selectable ringtones.
- Ring volume control.
- Doorbell.

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. 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.

3444	DUOX PLUS VEO TELEPHONE
Dimensions: 82x214 x43 mm.	

3452	DUOX PLUS LOFT EXTRA TELEPHONE
Loft Extra telephone dimensions: 85x220x40mm.	

3450	iLOFT DUOX PLUS TELEPHONE
Dimensions: 90x146,5x20mm. 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.	

Monitors and telephones accessories

ref.9410

ref.9420

ref.5636

ref.3749

ref.3388

ref.3389

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

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

3388	UNIVERSAL DECORATIVE FRAME. 120X240
3389	UNIVERSAL LARGE DECORATIVE FRAME. 210X240

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

3441	LOFT HANDSET WITH INDUCTIVE LOOP
3443	VEO HANDSET WITH INDUCTIVE LOOP

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

3. Guard unit

DUOX PLUS Guard Unit has a multi-functional 4,3" capacitive touch screen and quick function access buttons for easy and convenient management.

Its unique handset design incorporating a magnet enables the end-user to put it back into position correctly. It includes a stainless steel desktop support. It allows a surface installation.

ref.9423
Dimensions: 200x200mm
Desktop support included

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.

FERMAX

4. Installation devices

GLOBAL projects
by FERMAX
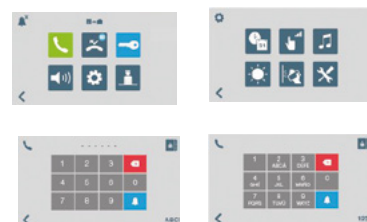
SIMPLE INSTALLATION (1 Building)

LESS COMPONENTS REQUIRED FOR INSTALLATION.
NO FLOOR DISTRIBUTORS. NO DECODERS. NO SWITCHERS
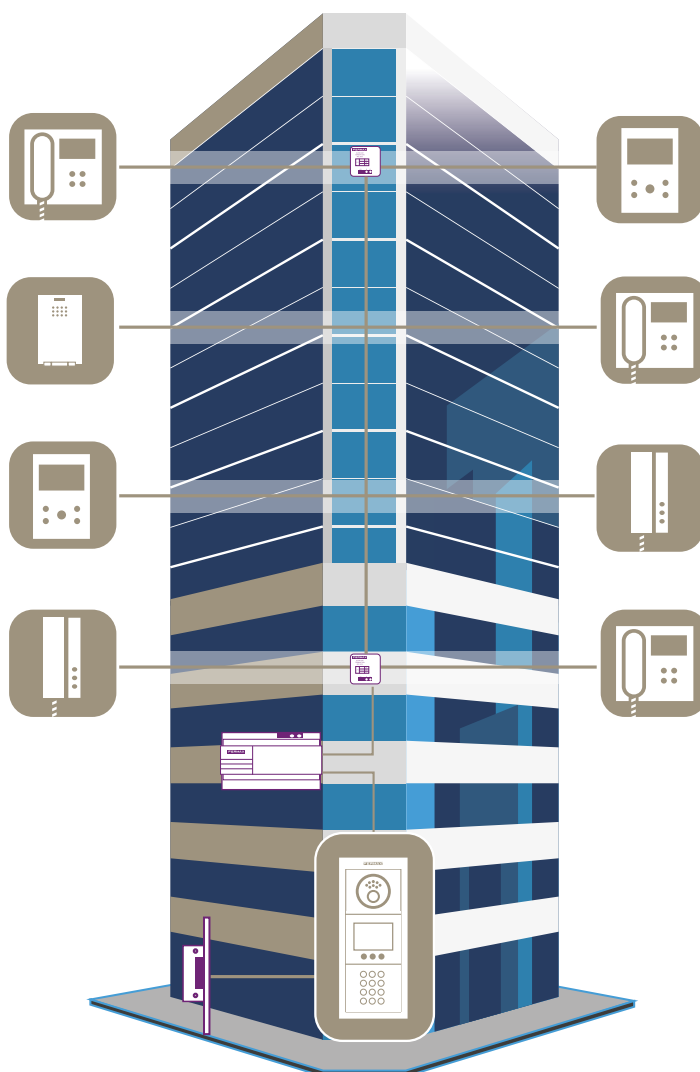
The only materials required are:

- Panel
- Power Supply
- Monitors and telephones
- Line adaptors

Apartments are easily connected at each level using simple terminal strips.

NOTE: Depending on the type and condition of cable and distances, additional regenerators, decoders or power supply might be required.

FERMAX

Technology DUOXplus
It takes 2 to connect

Power supply and Adaptors

For most common cases

In the most common installations, DUOX PLUS does not require any installation devices other than the power supply and a pair of line adapters per riser. The maximum number of monitors that can be connected to each power supply ref. 4825 depends on the installation topology, cable type and monitor model, as shown in the tables below.
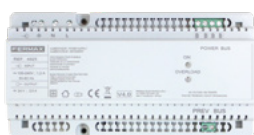
ref.3255   ref.4825

3255	DUOX PLUS LINE ADAPTOR
Necessary at the beginning and the end of every riser.	
4825	**POWER SUPPLY + FILTER 24VDC-2.5A DIN10**

TERMINAL CONSUMPTION TABLE PER POWER SUPPLY IN **DISTRIBUTION (6 PER FLOOR)**

	NO WIFI			WIFI		
	VEO	VEO-XS	VEO-XL	VEO	VEO-XS	VEO-XL
1.0mm	40	40	34	28	28	24
0.5mm²	40	38	30	24	24	18
0.2mm²	32	26	20	18	18	12

TERMINAL CONSUMPTION TABLE PER POWER SUPPLY **IN CASCADE**

	NO WIFI			WIFI		
	VEO	VEO-XS	VEO-XL	VEO	VEO-XS	VEO-XL
1.0mm	40	38	30	26	22	20
0.5mm²	32	28	22	20	18	14
0.2mm²	16	14	10	12	10	8

For specific cases

ref.4840   ref.3289

ref.4802   ref.4800

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.	
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.	
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.	

Lock Release

UNIVERSAL DOOR LOCK RELEASE

29588	LOCK RELEASE 300N-412-S MAX
67501	UNIV. LOCK RELEASE 990N-P22 MAX 10-24VAC/DC

UNIVERSAL ELECTRIC STRIKE

6750	UNIV. ELECTRIC STRIKE 990N MAX 10-24VAC/DC
6752	UNIV. ELECTRIC STRIKE 990A MAX 12-24VAC/DC

Note: If other models of door lock release are used and their power consumption is greater than 250mA, an additional separate power supply must be used.

FERMAX

EXTENDED INSTALLATION (multiple buildings or longer distances)

FOR ALL KINDS OF PROJECTS WITH LONGER DISTANCES, VERTICAL STRUCTURES OR HORIZONTAL INSTALLATIONS

GLOBAL
projects
by FERMAX

Simply add the required number of regenerators depending on the distances.
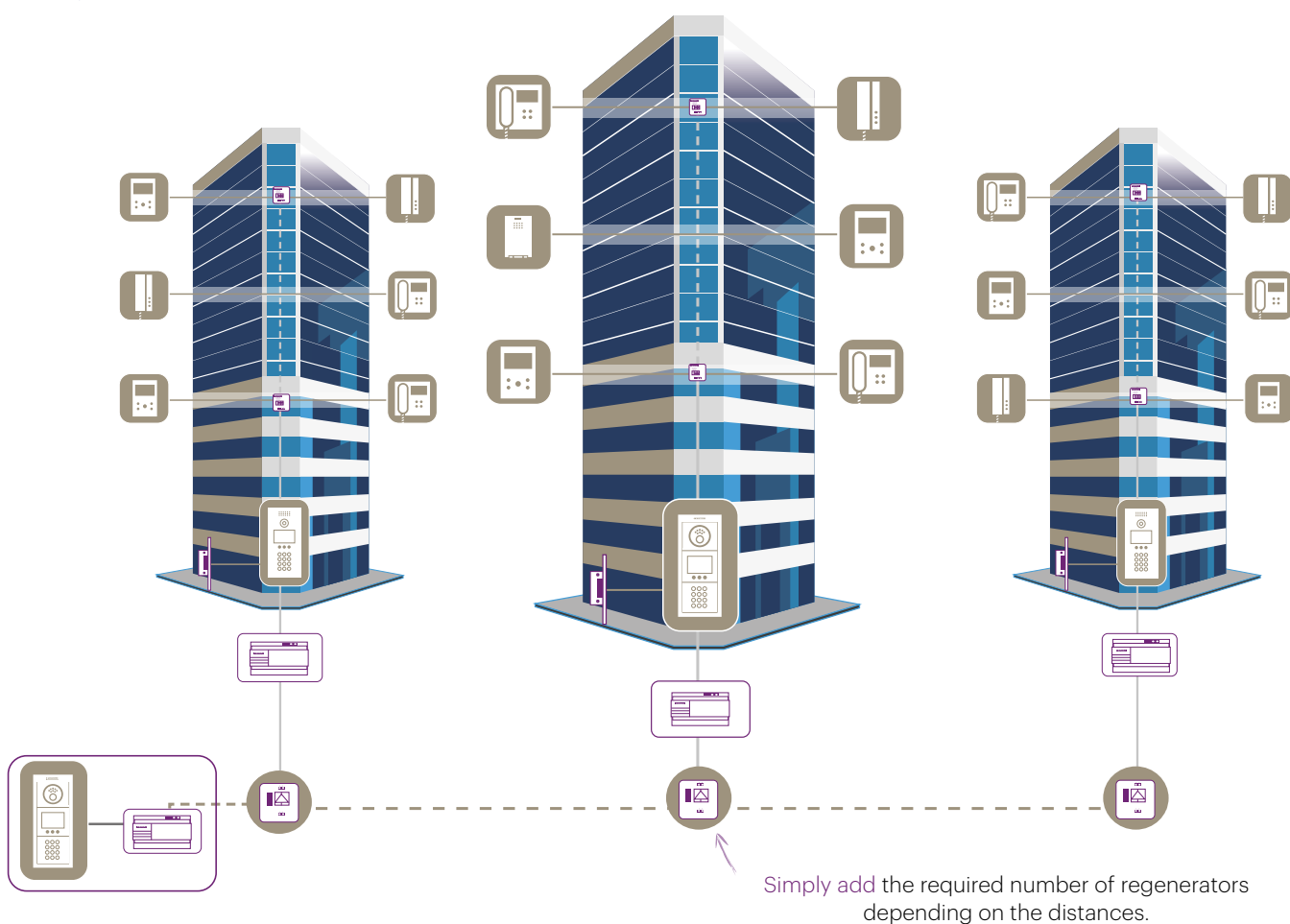
DUOX PLUS allows you to push the boundaries of digital technology.
Thanks to the digitalisation of the system, it can now be used in all kinds of installations. The more complex the installation is, the more powerful DUOX PLUS will be. Regenerators and decoders are the only elements to be added for large installations or long distances.

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

FERMAX

Technology DUOX plus

It takes 2 to connect

Regenerators and Decoders

Regenerators and decoders take scalability to the next level. No installation, no matter how large, can resist DUOX PLUS.

ref.3269

ref.3268

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. Up to 99 if connected in parallel.

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: https://fermax.com/intl-en/documents

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: https://fermax.com/intl-en/documents

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

DECODERS

9419	10/W DUOX PLUS DECODER/ISOLATOR

10-outputs floor decoder. One output per home, allowing up to 3 terminals (monitors/telephones) per home. Multiple decoders can be installed on each floor. Each output 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. In addition, when a short-circuit occurs on an output, the red LED associated with the output will light up, indicating the output on which the fault has occurred.

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 (sequential programming). Also, the decoder addresses can be programmed non-sequentially (open programming).

The decoder is powered directly from the DUOX PLUS bus. With DIN10 rail mounting and removable terminal strips for easy wiring and installation.

9425	4/W DUOX PLUS DECODER/ISOLATOR

Same as ref. 9419 but this is a 4-outputs floor decoder (DIN4) and the terminal strips are not removable.
DIN 6 rail mounting (including lateral fixing brackets for screws, width 106 mm). If the lateral fixing brackets for screws are removed, the width is 89 mm (DIN 5).

ref.9419

ref.9425

WHEN IS IT RECOMMENDED TO INSTALL THE SMART DECODER?
- When we have to install more than 6 terminals per floor in the building.
- When the distance between the terminals and the riser is greater than 25 metres or when this distance is unknown.
- When different types of wires are mixed in the same installation or all the cables go to the same point.

FERMAX

ADDITIONAL FUNCTIONS

MORE SECURITY
Add IP cameras to monitor specific areas of the building

Bring security to all your installations!

PL² Plug & Play

9453	IP/DUOX PLUS INTERFACE+CAMERA KIT

It includes the IP/DUOX PLUS camera interface (ref.9454) and the IP camera (ref.9985) already pre-configured for the most common case of an outdoor panel and an additional camera. It also includes the camera power supply (ref.9982) and its adapter (ref.9984).

IMPORTANT: Check compatibility with the technical department.

9454	IP/DUOX PLUS CAMERA INTERFACE

Allows the integration of IP video CCTV cameras into a DUOX PLUS installation. It transforms the IP video signal (standard RTSP) into a DUOX PLUS signal that is connected directly to the DUOX PLUS bus.

• Generally, one interface will be required for each camera installed in the DUOX PLUS installation. However, in the particular case of 2 cameras in the same block, up to 2 cameras can be configured on the same interface (in this case a PoE switch is required).

• Each camera will be powered externally with its additional power supply (ref. 9982+ref. 9984) or via a PoE switch.

• The interface is powered directly from the DUOX PLUS bus.

An outdoor panel can be associated to the interface, so that, while the IP camera is being viewed, it is possible to activate the opening of this panel.

12Vdc
2 NON-POLARISED WIRES
Video (V,M)
DUOX
Video (V,M)
12Vdc

IMPORTANT: Check compatibility with the technical department.

ref.9985

ref.1586
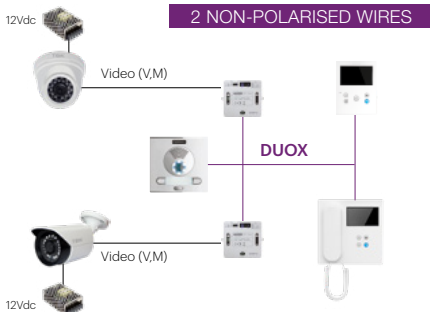
9985	PERIPHERAL IP DOME CAMERA

IP minidome camera (ceiling mount), 2MP resolution, 2.8mm fixed lens, IR LEDs, 30m range.

9982	POWER SUPPLY PERIPHERAL CCTV CAMERA

Power supply for analogue or IP auxiliary cameras.

9984	POWER ADAPTOR PERIPHERAL CCTV CAMERA

Power adapter, with a jack plug to connect the power supply to the camera.

1586	4 POE PORTS SWITCH

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

FERMAX

MORE FUNCTIONS

Activate a second gate, garden gate, or garage entrance door with DUOX PLUS relays that connect directly to the system bus, without additional wiring

ref.3233

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.

DIN 6 rail mounting (including lateral fixing brackets for screws, width 106 mm). If the lateral fixing brackets for screws are removed, the width is 89 mm (DIN 5).

ref.3267

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.

DIN 6 rail mounting (including lateral fixing brackets for screws, width 106 mm). If the lateral fixing brackets for screws are removed, the width is 89 mm (DIN 5).

2

ref.2040

CALL ACCESSORIES

2040	ELECTRONIC CALL EXTENSION BELL

CABLES

5925	DUOX PLUS PARALLEL CABLE 2x1mm2

ref.5925

TESTER

9404	DUOX PLUS TESTER

The DUOX PLUS Tester is the ideal tool for the installer. It is used to assess the operation of each outdoor panel with the DUOX PLUS terminals in an installation, without the need to enter the apartments.
A test is initiated from a panel to one or more terminals and the operation of that panel with those terminals is checked.
This action is performed from a user interface on a web browser. From a mobile phone, tablet or computer we can connect to the installation through the WiFi generated by the TESTER DUOX PLUS.

DIN 6 rail mounting (including lateral fixing brackets for screws, width 106 mm). If the lateral fixing brackets for screws are removed, the width is 89 mm (DIN 5).
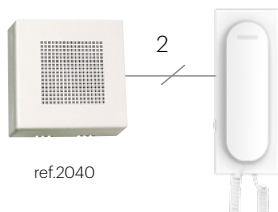
ref.9404

FERMAX

DUOX PLUS PLUS VIDEO. SKYLINE PANEL/VEO WIFI AND VEO-XS WIFI MONITOR

No. APA.	SERIES	FRAME 3V ref.7333	FLUSH BOX ref.8854	FRAME 4V ref.7334	FLUSH BOX ref.8855	5V ref.7335	FLUSH BOX ref.8856	6V ref.7336	FLUSH BOX ref.8857	7V ref.7337	FLUSH BOX ref.8858	8V ref.7338	FLUSH BOX ref.8982	JOINING BOLTS ref.8829	CABLE ref.2541	AMPLIF. MODULE ref.73911	201 ref.7376	202 ref.7372	204 ref.7371	BLANK V ref.7442	BLANK 2V ref.7443	POWER SUPPLY ref.4825	LINE ADAPTOR ref.3255	REGENERATOR ref.3268	VEO MONIT. + CONNECT. ref.9446 + ref.9447	VEO-XS MON. + CONNECT. ref.9449 + ref.9447
2	S4	1	1													1	1					1	2		2	2
4	S4	1	1													1		1				1	2		4	4
6	S5			1	1											1	1		1			1	2		6	6
8	S5			1	1											1	1		1			1	2		8	8
10	S6					1	1									1	1		1			1	2		10	10
12	S6					1	1									1	1	1	1			1	2		12	12
14	S7							1	1							1	1	1	1			1	2		14	14
16	S7							1	1						1	1	1	1	2			1	2		16	16
18	S8									1	1				1	1	1	1	2			1	2		18	18
20	S8									1	1				1	1	1	1	2			1	2		20	20
22	S9											1	1	1	1	1	1	1	3			1	2		22	22
24	S9											1	1	1	1	1	1	1	3			1	2		24	24
24	S5			2	2									1	1	1			3			1	2		24	24
26	S6					2	2							1	1	1	1	2	2	1		1	2		26	26
28	S6					2	2							1	1	1	1	1	3	1		1	2		28	28
30	S6					2	2							1	1	1	1	1	3			2	2		30	30
32	S6					2	2							1	1	1	1	2	3			2	2	1	32	32
32	S7							2	2					1	1	1			4		1	2	2	1	32	32
34	S7							2	2					1	1	1	1		4	1		2	2	1	34	34
36	S7							2	2					1	1	1		1	4	1		2	2	1	36	36
38	S7							2	2					1	1	1	1	1	4			2	2	1	38	38
40	S7							2	2					1	1	1			5			2	2	1	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.

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

FERMAX

DUOX PLUS VIDEO. SKYLINE PANEL/VEO AND VEO-XS MONITOR

SKYLINE PANEL No. SERIES APA.	FRAME 3V ref.7333	FLUSH BOX ref.8854	FRAME 4V ref.7334	FLUSH BOX ref.8855	FRAME 5V ref.7335	FLUSH BOX ref.8856	FRAME 6V ref.7336	FLUSH BOX ref.8857	FRAME 7V ref.7337	FLUSH BOX ref.8858	FRAME 8V ref.7338	FLUSH BOX ref.8982	JOINING BOLTS ref.8829	CABLE ref.2541	AMPLIF. MODULE ref.73911	201 ref.7376	202 ref.7372	204 ref.7371	BLANK V ref.7442	BLANK 2V ref.7443	POWER SUPPLY + FILTER ref.4825	LINE ADAPTOR ref.3255	REGENE RATOR ref.3268	VEO MONIT. + CONNECT ref.9445 + 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					1	2		4	4
6 S5			1	1											1	1	1				1	2		6	6
8 S5			1	1											1	1	1				1	2		8	8
10 S6					1	1									1	1		1			1	2		10	10
12 S6					1	1									1	1	1	1			1	2		12	12
14 S7							1	1							1	1	1	1			1	2		14	14
16 S7							1	1							1	1		2			1	2		16	16
18 S8									1	1					1	1		2			1	2		18	18
20 S8									1	1					1	1	1	2			1	2		20	20
22 S9											1	1			1	1	1	2			1	2		22	22
24 S9											1	1	1	1	1	1		3			1	2		24	24
24 S5			2	2									1	1	1	1		3		1	1	2		24	24
26 S6					2	2							1	1	1	1	2	2			1	2		26	26
28 S6					2	2							1	1	1	1	1	3	1		1	2		28	28
30 S6					2	2							1	1	1	1	1	3	1		1	2		30	30
32 S6					2	2							1	1	1		2	3			1	2	1	32	32
32 S7							2	2					1	1	1	1	1	4			1	2	1	32	32
34 S7							2	2					1	1	1	1		4	1		1	2	1	34	34
36 S7							2	2					1	1	1	1	1	4	1		1	2	1	36	36
38 S7							2	2					1	1	1	1	1	4			1	2	1	38	38
40 S7							2	2					1	1	1			5			1	2	1	40	40

This table has been configured assuming 1mm2 multi-core parallel cable and floor distribution.

For more information about DUOX PLUS, see the technical books available at: https://fermax.com/intl-en/documents

Distance between connection points: A minimum distance of 3 metres between different connection points is always recommended.
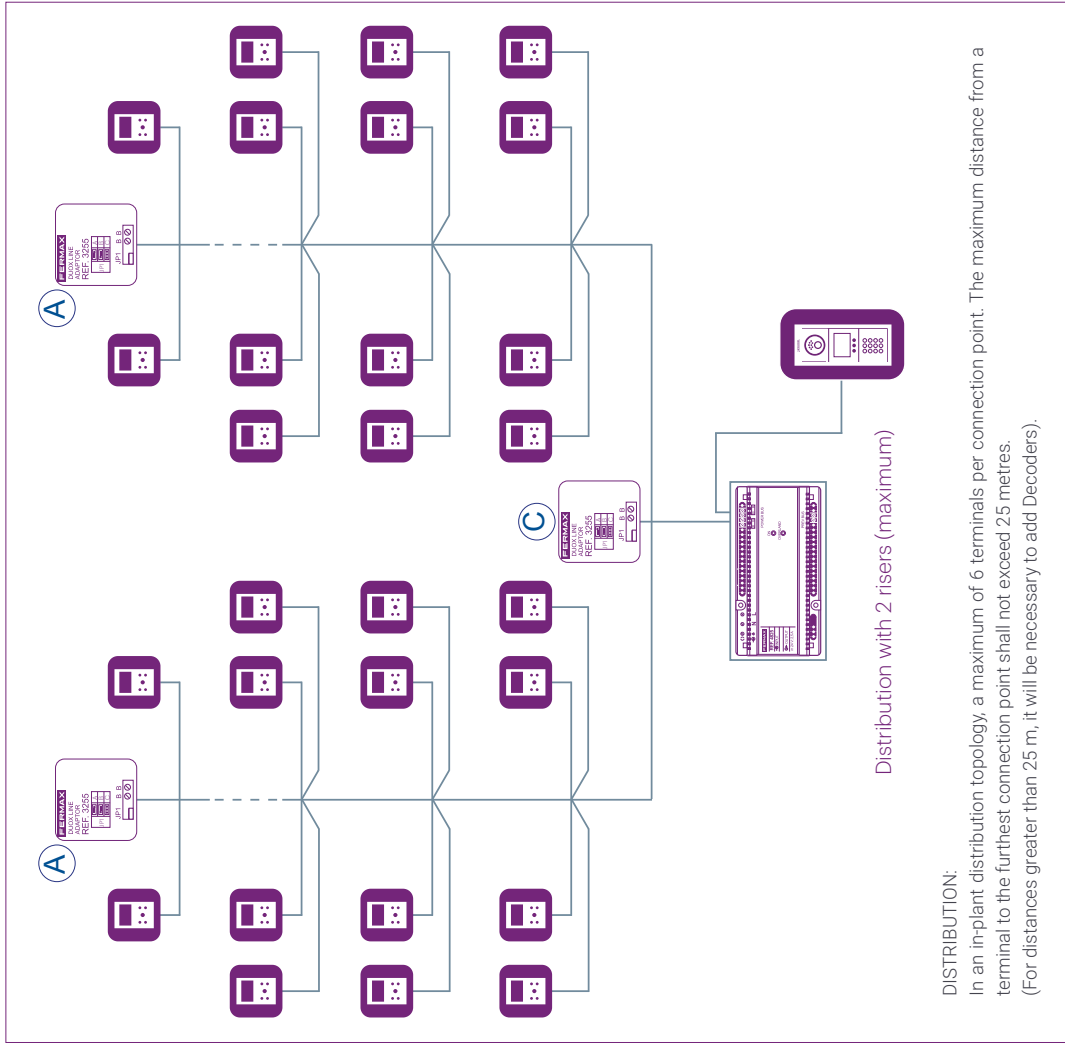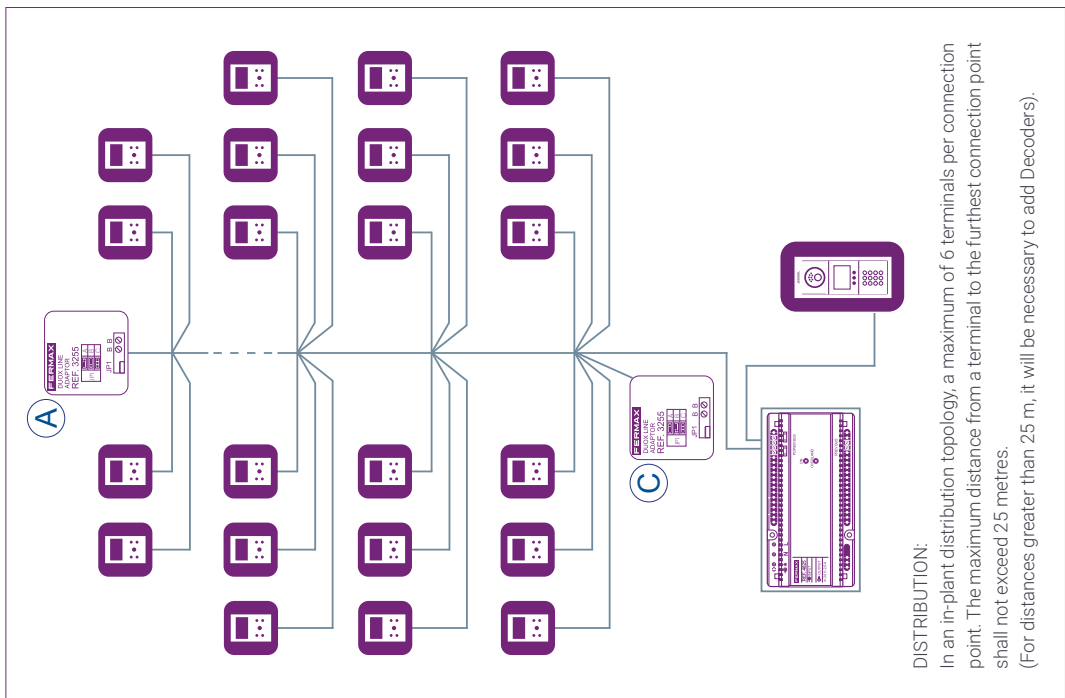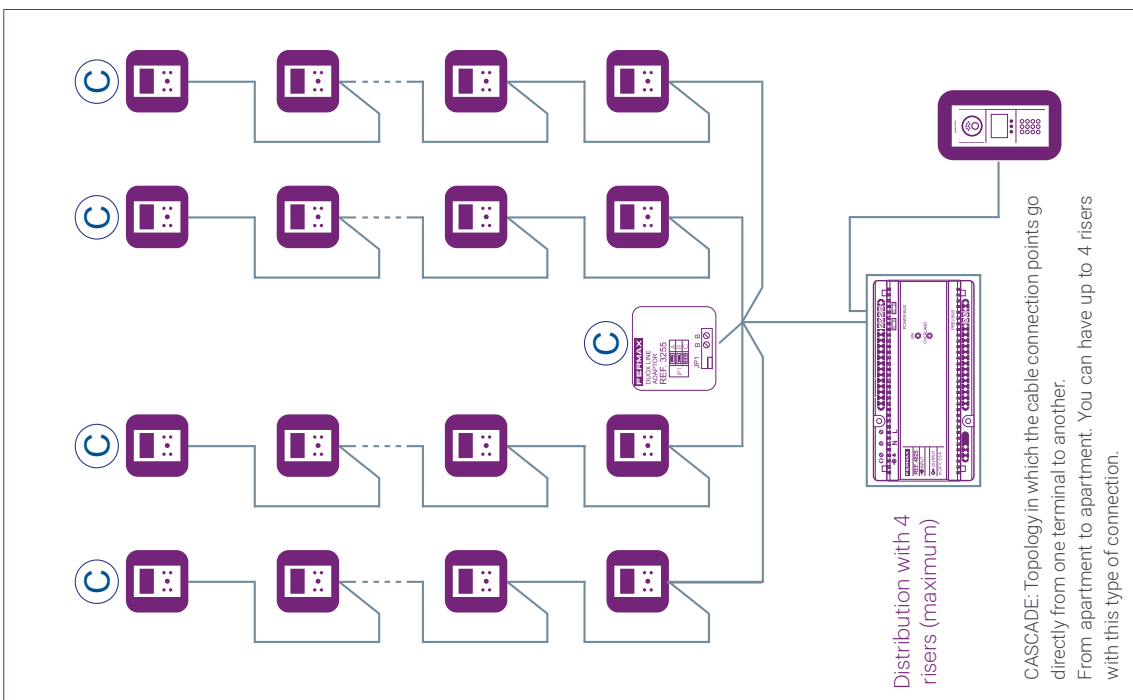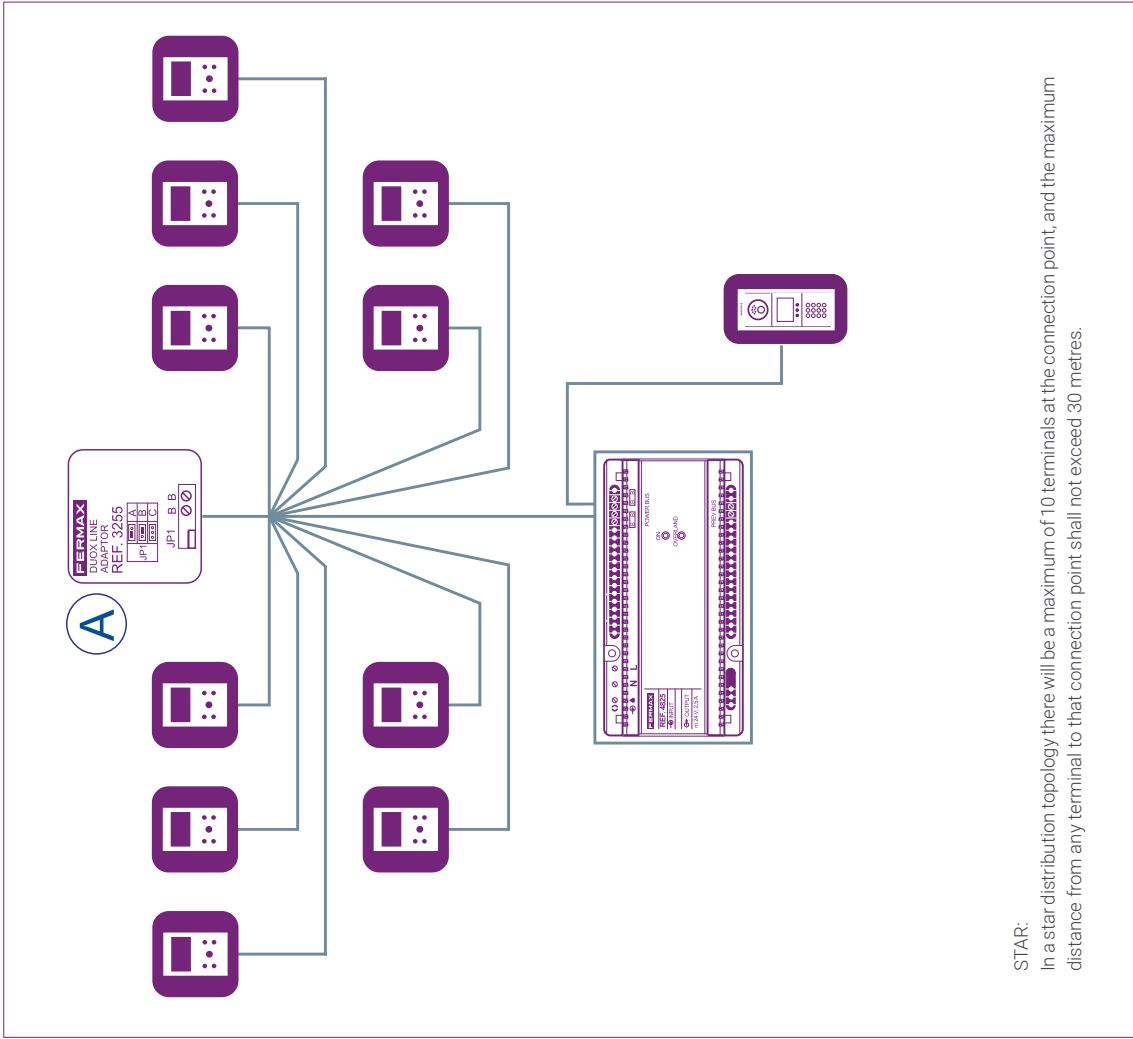
MAXIMUM DISTANCE FROM THE OUTDOOR PANEL TO THE FIRST CONNECTION POINT

Cascade 1 riser	Cascade 2-4 risers	Star	Distribution 1 riser	Distribution 2 risers
55 m	25 m	30 m	55 m	35 m

Distribution with 2 risers (maximum)

DISTRIBUTION:
In an in-plant distribution topology, a maximum of 6 terminals per connection point. The maximum distance from a terminal to the furthest connection point shall not exceed 25 metres.
(For distances greater than 25 m, it will be necessary to add Decoders).

DISTRIBUTION:
In an in-plant distribution topology, a maximum of 6 terminals per connection point. The maximum distance from a terminal to the furthest connection point shall not exceed 25 metres.
(For distances greater than 25 m, it will be necessary to add Decoders).

IMPORTANT: It is recommended to power the electric lock release independently, whenever possible. It is also essential for AC electric strikes, for which the power supply ref. 4802 o ref. 4800 is recommended. If you wish to install a 12Vdc electric lock release without an additional power supply, we recommend the low consumption Fermax model ref. 29588.

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

FERMAX

Technology DUOXplus

It takes 2 to connect

2 NON-POLARISED WIRES

A — FERMAX DUOX LINE ADAPTOR REF. 3255

STAR:
In a star distribution topology there will be a maximum of 10 terminals at the connection point, and the maximum distance from any terminal to that connection point shall not exceed 30 metres.

C — FERMAX DUOX LINE ADAPTOR REF. 3255

Distribution with 4 risers (maximum)

CASCADE: Topology in which the cable connection points go directly from one terminal to another. From apartment to apartment. You can have up to 4 risers with this type of connection.

IMPORTANT: It is recommended to power the electric lock release independently, whenever possible. It is also essential for AC electric strikes, for which the power supply ref. 4802 o ref. 4800 is recommended. If you wish to install a 12Vdc electric lock release without an additional power supply, we recommend the low consumption Fermax model ref. 29588.

FERMAX