EN 54-2
EN 54-4
EN 54-13
EN 54-21
EN 12094-1

Cert. No. 991k

Previdia Max

Previdia Max is a modular system for the realization of fire detection systems (and extinction systems). Previdia Max control panels can comprise a single cabinet or multiple cabinets (max. 4) hooked together. The control panels can be used individually or interconnected in a network. The network connection can be achieved through an RS485 BUS, via a TCP-IP connection or by means of a combination of both.

Certifications

In automated detection and fire extinguishing systems, in consideration of their field of use which is decisive for the safety of people and the respective mandatory regime, certifications are a fundamental aspect. That is why the Previdia Max system has obtained all the necessary certificates from the most prestigious European institute in the field of fire prevention: LPCB.

Additionally, to provide peace of mind to installers, system designers and end-users, the certificates were obtained in compliance with all applicable standards:

EN54-2	Control panel and signalling devices
EN54-4	Power supply units
EN54-21	Alarm transmission and remote fault signalling and warning equipment
EN12094-1	Gas extinguishing system components – automatic electrical command and shutdown and delay management devices
EN54-13	Compatibility of system components

This means that in addition to the standard certifications required for fire detection systems, Previdia Max has obtained further certification – in regard to exclusive functions and features – uncommon in the sector and that place it in a dominant position at the top of the market.

The evolution of fire detection systems

Highly simplified

Thanks to its graphic colour touchscreen, Previdia Max simplifies configuration, management and maintenance of the system and makes almost effortless what was until today time consuming and complicated.

Highly intuitive

Thanks to innovative concepts such as the graphic-map feature which provides instant location of danger, and video verification that uses IP cameras to provide real-time images of the exact point of an alarm, Previdia Max drastically reduces response times during moments of real danger and greatly reduces the false alarm rate.
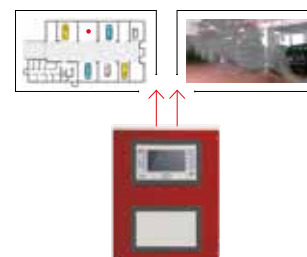
Highly flexible

Thanks to its modular architecture, Previdia Max offers a system that is suitable for all types of installations, from small business premises to large airports, hotels and shopping malls. The use of completely functional modules offers optimized protection to the electronic components and allows the addition of those specific functions installations so often require. Each control panel can be made up of a minimum of one cabinet to a maximum of four and is capable of managing up to 32 IFM modules.

Highly intelligent

Thanks to a distributed-intelligence structure which uses a microprocessor inside each module, redundant microprocessors in the main unit and the possibility of having a backup CPU, Previdia Max guarantees unmatched reliability. The security of the system is no longer entrusted to a single processing unit but to a group of interconnected CPUs which operate in synergy to provide the fastest and most effective response.

Highly articulated

Thanks to its powerful network architecture, Previdia Max allows the realization of hybrid systems based on connections using bights, fiber optics and TCP-IP networks capable of overcoming all barriers and of reaching unprecedented cover. Each cluster of control panels interconnected through a Hornet+ network can support up to 48 control panels, and up to 20 clusters can be connected through a TCP/IP network.
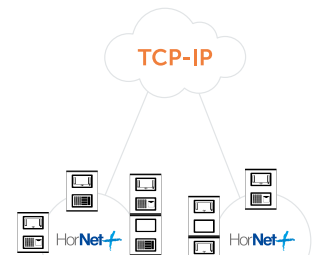
Highly robust

Thanks to HOT SWAP technology, modules can be added or replaced without shutting down the system, thus providing Previdia Max with a fast, safe method of intervention without any services interruptions.
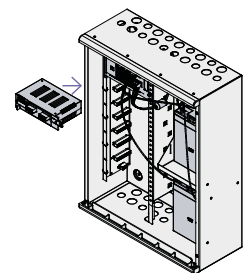
Highly reliable

Thanks to loop control modules equipped with 'power up boosters,' Previdia Max allows you to set the operating voltage of each separate cable thus ensuring reliability and wiring simplicity.
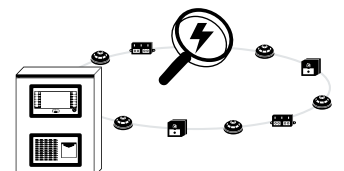
Highly multimedial

Thanks to the intensive use of new technologies such as the Web Server, electronic mail, TCP-IP connections, telephone and GSM communications, Previdia Max provides a system that is always under control and in reach. Both for the end-user and control and maintenance personnel.

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The system

CAN DRIVE

Single cabinet systems

If the Previdia Max system consists of a single cabinet with a primary CPU unit (crucial for system functioning), it will be possible to install on front door a second module, selected from the following list.

FPMNUL	Plastic support with no functions
FPMLED	Signalling module with 50 individually programmable tri-colour LEDs
FPMLEDPRN	Signalling module with 50 individually programmable tri-colour LEDs and an 80mm printer
FPMEXT	Extinction channel status module, to be used when the control panel is equipped with IFMEXT modules for the management of automatic extinction systems
FPMCPU	CPU module (identical to the primary unit) configures itself automatically as a secondary CPU unit. In the event of fault on the primary CPU unit, it will take over thus making 100% of the functions on the primary CPU redundant

The cabinet has a CAN DRIVE for the interconnection of a maximum of 8 IFM modules. In accordance with the needs of the system, the following modules are available.

|	
IFM24160 (max. 4)	Power supply module
IFM2L (max. 8)	Module for the management of two ring circuits for devices distributed in the protected area, commonly referred to as a LOOP
IFM4R (max. 16)	4 programmable relay module
IFM4IO (max. 16)	4 supervised power Input/Output module
IFMDIAL (max. 1)	PSTN and GSM line dialler module
IFM16IO (max. 4)	Module with 16 low-power Inputs/Outputs
IFMNET (max. 1)	Control panel to Hornet+ network connection module
IFMLAN (max. 1)	Advanced TCP-IP service management module (Video verification, Web interface web, Electronic mail, etc.)
IFMEXT (max. 24)	Gas extinction-system management module

The first position at the top of the CAN DRIVE bar is for the IFM24160 power supply module (essential for the proper functioning of the control panel). The remaining 7 connectors can be used for the connection of any of previously mentioned modules (the maximum number at the side of each module refers to applications with several cabinets).

Multi-cabinet control panels

In order to expand the capacity of each control panel, several cabinets (maximum 4) can be assembled together to form a cabinet of increased dimensions.
The cabinets can be assembled together by means of the mounting screws (supplied), once assembled the CAN DRIVE bars can be connected together using the wire (supplied). The assembled cabinets provide the respective number of housings for the front plate and CAN DRIVE bar modules.
Each cabinet can house an IFM24160 power-supply module. A control panel with more than one IFM24160 power-supply module will have a total current equal to the sum of the maximum currents of the installed power-supply modules. The power-supply modules will share the load current automatically.
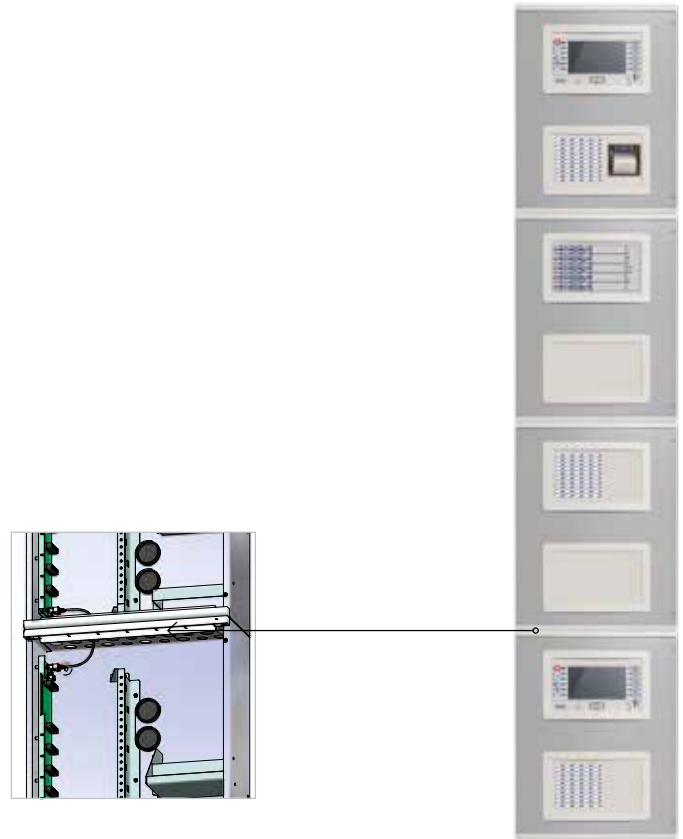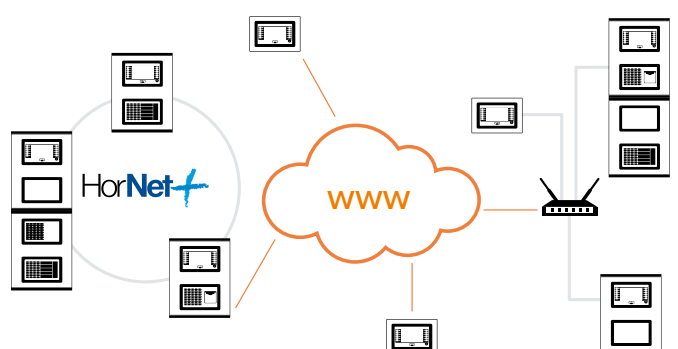
Control panel network
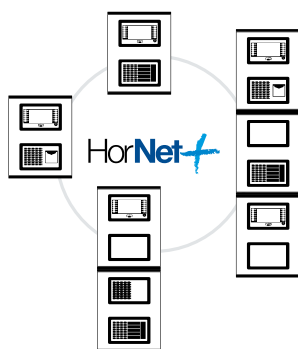
Control panels in a Hornet+ network

The system can be expanded by simply connecting other control panels (maximum 48) in such a way as to constitute a system with increased capacity (Hornet+ network).
In order to connect two or more control panels in a Hornet+ network, it is necessary to install an IFMNET module in each control panel. This module provides two RS485 ports for the ring connection.

Control Panels in an IP network

Several control panels or Hornet+ networks of control panels can be connected together by means of a TCP-IP connection. Each node of such a connection type is identified as a 'Cluster;' each 'Cluster' can be made up of a single control panel, a Hornet+ network of control panels or a Repeater (FPM-CPU unit configured as a remote keypad).

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Previdia216

PREVIDIA MAX

Each installation must start from a basic control panel to which, when necessary, can be added function modules, cabinets and accessory devices. Previdia216 is an analogue-addressable control panel that can be networked for automatic fire detection and alarm signalling systems.

Configuration of the base control panel:

Metal cabinet
N°1 FPMCPU module – control unit with display
N°1 IFM24160 – 4A power-supply modules with built-in battery charger
N°1 IFM2L – 2 loop management module

Previdia216R

The same as Previdia216 but comes in a red cabinet.

Accessories

A vast selection of accessory items and devices allows easy expansion of the control panel (Add-on cabinets) or assembly of installations in accordance with wiring needs.

PRCAB

Add-on cabinet complete with door, CAN DRIVE bar for the connection of function modules, battery shelves. The door provides two apertures for two FPM modules (if certain functions are not required, two FPMNUL modules can be used to seal the apertures).
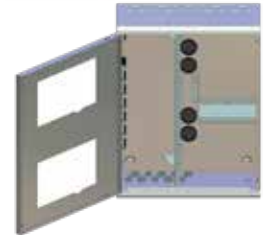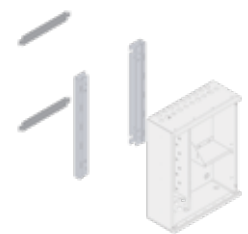
PRCABR: cabinet as per item PRCAB but in red.

PRCABSP

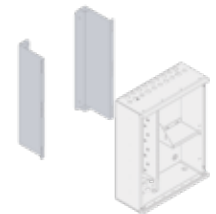Pair of brackets for mounting the cabinet away from the wall. This accessory item provides a 5cm space for the passage of cables between the back of the cabinet and the wall it is attached to.

PRCABSPR: as per item PRCABSP but in red.

PRCABRK

Bracket for mounting the cabinet to a 19' rack.

PRREP

Enclosure for mounting FPMCPU module as remote repeater. Comprises a brushed aluminium plate and a metal backbox, can be wall or surface mounted.
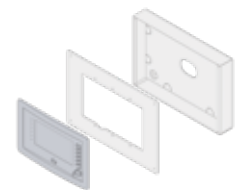
DEMO CASE FOR THE PREVIDIA SYSTEM

Demo Case for Previdia Max System, practical case containing Previdia216 control panel and several already-connected loop devices. Useful for technical trainings.

ORDER CODES

INDSIN1PPRAEDEMO	Demo luggage.

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Previdia Compact

PREVIDIA|COMPACT

The analogue-addressable control panels from the Previdia Compact series represent the ideal solution for small to medium installations, combining inside a compact cabinet the innovative features of the Previdia Max system and a unique ease of use. Programming from the display through a clear and intuitive user interface allows you to minimize the system activation and maintenance times, making Previdia Compact the ideal choice.

Certifications

In automated detection and fire extinguishing systems, in consideration of their field of use which is decisive for the safety of people and the respective mandatory regime, certifications are a fundamental aspect.
This is why the Previdia Compact system has obtained all the necessary certificates from the IMQ in compliance with all the applicable standards:

EN54-2	Control panel and signalling devices
EN54-4	Power supply units
EN54-21	Alarm transmission and remote fault signalling and warning equipment
EN12094-1	Gas extinguishing system components – automatic electrical command and shutdown and delay management devices
EN54-13	Compatibility of system components

Simple installation

Thanks to the 4.3" graphic colour touch-screen, the configuration and maintenance of the system is simple and fast, the intuitive interface and the complete programmability of all the essential parameters provide a tool that is unmatched by other control panels available on the market.

Simple and intuitive for the user

Previdia Compact control panels manage graphic maps and video verification for rapid and effective management of emergencies in the same way as the Previdia Max modular versions.
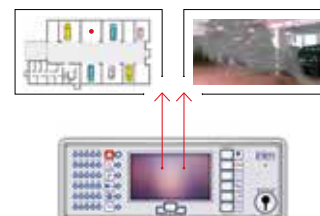
Compact

Previdia Compact is available in two sizes to suit different installation needs:
- Small, with 1.5A power supply and 7Ah batteries

- Large, with 4A power supply and 17Ah batteries

Networkable

Previdia Compact control panels are HORNET+ network connectable (max. 50 nodes). This feature makes it possible to build networks that include Previdia Compact and Previdia Max

control panels, thus optimizing each node in the network. As well as the Hornet+ network, networking via TCP-IP (MAX 20 Cluster) is also managed.

TCP-IP
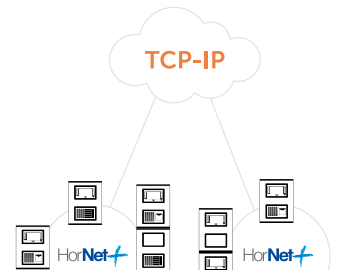
Management of extinguishing systems

Previdia Compact control panels with the extinguishing function are capable of managing an extinguishing channel.

When combined with a HORNET+ network, they can operate as satellite control units for Previdia Max expandable control panels.

Always connected

The control panels provide an on-board Ethernet connection for remote networking and supervision via TCP-IP. In addition, they manage SIA-IP and MODBUS protocols over TCP-IP. Installing a Previdia-C-DIAL optional module

allows the control panel to manage voice and digital communications over a wired telephone line and a 3G line, as well as record and replay voice messages and send automated SMS text.
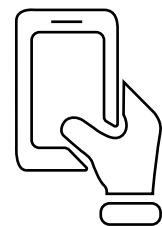
Three different front plates for clear indications

The control panels come in different models with three different front plates which provide the necessary indications for easy user understanding.

- Standard version
- Version with LED zone-status indicators
- Version with LED zone-status indicators and extinguishing channel

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Order codes

The control panels are available in different models as shown in the following code table:

PREVIDIA-COMPACT PREFIX	PREVIDIA-C	Prefix which indicate Previdia Compact range: **Previdia-C**
NUMBER OF LOOPS	200	Loops capacity: **200** = 2 loops 240 device each **100** = 1 loops 240 devices **50** = 1 loops 64 devices
CABINE SIZE	S	Size of cabinet, power supply, battery: **S** = 325x325x80mm - 1.5A - 2 x 7Ah **L** = 497x380x87mm - 4A - 2 x 17Ah
ZONE STATUS LED MODULE	Z	Zone LED **Z** = zone LED available .= zone LED not available
EXTINCTION CHANNEL	E	Extinction **E** = 1 extinction channel .= no extinction
CABINET COLOUR	G	COLOUR **G** = grey **R** = red

MODEL	LOOP CAPACITY			CABINET		ZONE STATUS LED	EXTINCTION MANAGEMENT
	1 LOOP OF 64 POINTS	1 LOOP OF 240 POINTS	2 LOOPS OF 240 POINTS	SMALL WITH POWER-SUPPLY @ 1.5A AND 7Ah BATTERIES	LARGE WITH POWER-SUPPLY @ 4A AND 17Ah BATTERIES		
C050S	✓			✓			
C100S		✓		✓			
C200S			✓	✓			
C050L	✓				✓		
C100L		✓			✓		
C200L			✓		✓		
C050SZ	✓			✓		✓	
C100SZ		✓		✓		✓	
C200SZ			✓	✓		✓	
C200LZ			✓		✓	✓	
C050SZE	✓			✓		✓	✓
C100SZE		✓		✓		✓	✓
C200SZE			✓	✓		✓	✓
C200LZE			✓		✓	✓	✓

PREVIDIA-C-DIAL

Remote communicator module for installation inside Previdia Compact control panels, manages remote communications via wired telephone lines and 3G GSM networks, capable of managing voice calls, records up to 100 voice messages, manages digital calls via the most widely-used protocols as well as automated SMS text messages.

PREVIDIA-C-REP

Remote keypad with attractive compact design, connects to HORNET+ network (double RS485 connection), acts as a remote keypad for both Previdia Compact and Previdia Max control panels. It provides detailed information about the entire network, customizable display. Available in the following versions:
- PREVIDIA-C-REPW: basic version. Enclosure in white plastic

- PREVIDIA-C-REPEW: version with indications relative to an extinguishing channel. Enclosure in white plastic
- PREVIDIA-C-REPR: basic version. Enclosure in red plastic
- PREVIDIA-C-REPER: version with indications relative to an extinguishing channel. Enclosure in red plastic

PREVIDIA-C-COM
SERIAL COMMUNICATIONS MANAGEMENT MODULE

The optional PREVIDIA-C-COM module, once installed inside the cabinets of Previdia Compact control panels, provides two RS232 ports and two RS485 ports for the connection of remote communicators, using the following protocols.

Communication protocol	Available on RS232 ports	Available on RS485 ports	Description
ESPA444	YES	NO	Protocol for interfacing with control panels to pagers, third-party remote communicators
PASO	NO	YES (some models require both RS485 ports)	Protocol for interfacing between the control panel and the Voice EVAC-system
WEB WAY ONE	YES	NO	Protocol for interfacing with WEB-WAY-ONE remote communicators
SMART-485-IN	NO	YES	Communication protocol with the Inim SMART-485-IN module which allows connection to the standard interface panels required in some countries
LOG ON SERIAL - ASCII PRINTER	YES	NO	Sends events to the port in real time in ASCII format (to a printer or receiving devices)
LOG ON SERIAL - SMART LOOP FORMAT	YES	NO	Sends events to the port in real time in the format used by SmartLoop series control panels
LOG ON SERIAL - PLUS II PRINTER FORMAT	YES	NO	It sends events to the port in real time in compatible format for Custom PLUSII printers
LOG ON SERIAL - WITHOUT CONTROLS	YES	NO	Sends events to the port in real time in ASCII format without any control for the printers

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PREVIDIA-C-COM-LAN
SERIAL COMMUNICATIONS MANAGEMENT
MODULE AND ADVANCED TCP-IP FUNCTIONS

The PREVIDIA-C-COM-LAN module, in addition to the functions described for the PREVIDIA-C-COM module (2 RS232 ports and 2 RS485 ports), provides a socket for connection to the Ethernet network, by means of this second connection (the motherboard and the module must both be connected to the same network) the following advanced TCP-IP functions are implemented:

- E-mail management
- Interactive WEB page with graphic maps for full management of the control panel
- Video-verification through connection to IP cameras with ONVIF protocol
- BACnet protocol (subject to PRE-BAC-LIC licence)
- Interfacing to EVAC TUTONDO systems (via TCP-IP)

Technical features

- Compact analogue-addressable control panel capable of managing 1 x 64-point loop, 1 x 240-point loop or 2 x 240-point loops (depending on the model)
- Multiprotocol, it manages Inim, Apollo and Argus security protocols on the loop
- Integrated 1.5A or 4A power supply (depending on the model)
- Integrated 7Ah or 17Ah battery charger (depending on the model)
- Sturdy metal cabinet with front plate in plastic
- Terminals for connection in a HORNET+ network with other control panels or remote keypads integrated on board
- On-board Ethernet connection for remote management, networking between control panels or connection to BMS monitoring software, MODBUS protocol over TCP-IP available
- USB port for configuration
- Management of a micro-SD card for the visualization of topographic maps, saving and retrieving of configurations, and storing of the events log
- 4 on-board I/O channels configurable as 1A supervised power outputs, supervised inputs

- On-board configurable relay
- 4.3" graphic colour touch screen
- Function keys in silicone for basic functions
- 30 multicolour LEDs included (depending on the model) for displaying the status of the first 30 zones or configurable
- Management of a gas-extinguishing channel (depending on the model), certified EN12094-1
- Programmable from the front plate or via the Previdia/STUDIO configuration software available on the Inim website
- 1000 configurable zones
- 1000 output groups for activation logics
- Logical equations for the definition of the most complex activation conditions
- Timers for the timed management of activations, bypass operations, etc.
- Log for the last 2000 events
- Management of up to 100 access codes
- Customizable display with images, status indication icons for the various elements, text and function buttons
- Management of evacuation matrices.