

FIRE DETECTION

GENERAL CATALOGUE







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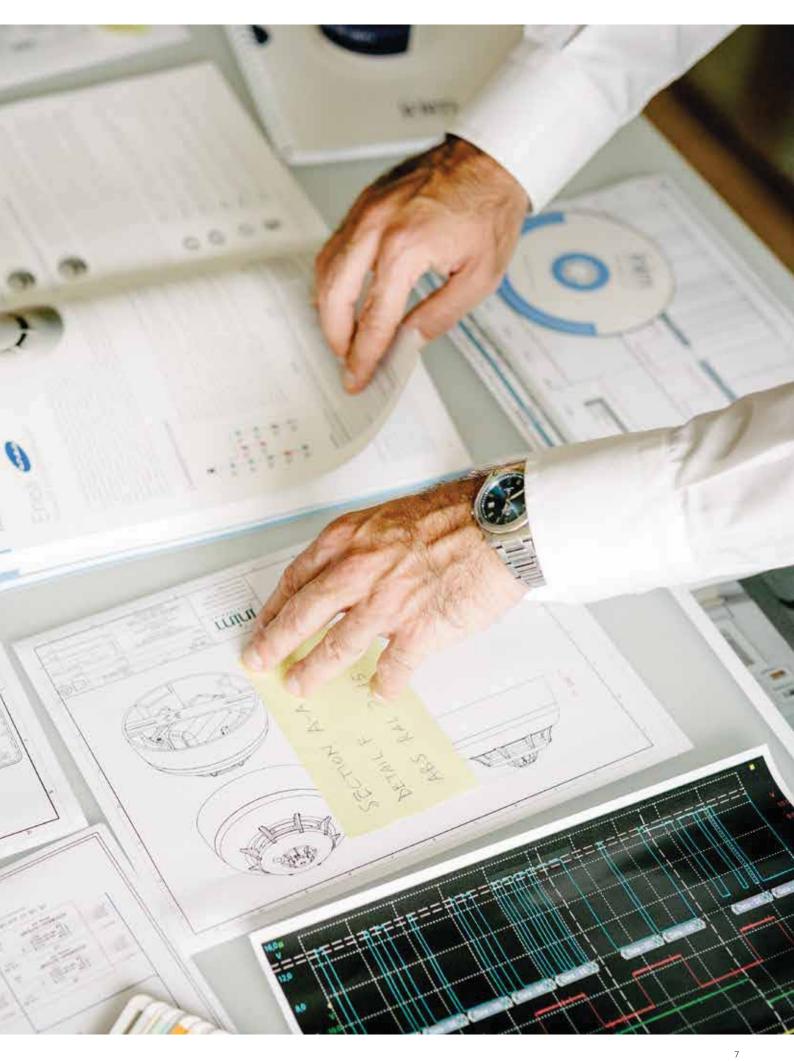
- F-Com/STUDIO



Made in Inim. Made in Italy.

The energy of an Italian company in continuous evolution.
The innovation of intrusion, fire detection and home automation systems made in Italy and appreciated throughout the world.
The quality of fully certified products, easy to install and even easier to use.
The security of having us by your side.





Technologies

Inim is continuously active in the search for forward thinking solutions to the everyday challenges faced by installer companies. In pursuance of this quest, INIM's R & D professionals are always looking to push the known boundaries of technology toward a totally new class of products with unmatched capabilities. Every INIM device is designed

to take full advantage of state-of-the-art microcontroller technology, network architecture and communication infrastructures. The following pages allow you to take a glimpse at the technologies developed at INIM's laboratories and catch sight of the future of fire detection, today.



OpenLoop technology is the outcome of the concerted efforts of the R & D professionals at INIM Electronics. In fact, this technology can manage different brands of field devices without need of any intervention on the control panel hardware. This is the most high-tech approach to device management available on the fire security market to date. The loop is, in fact, 'open' and ready to manage devices of different brands without requiring any changes or add-ons to the standard

control panel. With OpenLoop technology it is possible for different-brand devices to coexist on the same control panel as long as they are connected to different loops. This technology is present in the SmartLight, SmartLoop and Previdia analogue series control panels.

The performance of OpenLoop technology is

The performance of OpenLoop technology is enhanced when used in conjunction with the Versa++ and LoopMap technologies built into in Inim's ENEA analogue detector series.



HorNet and HorNet+

A network based on 'HorNet' or 'HorNet+' technology represents the state-of-the-art of RS485 embedded systems. The architecture of such networks provides a 'fault-tolerant' system, in other words, a system that is capable of configuring itself during fault conditions in such a way as to ensure the integrity of communications between the system control

panels at all times. The 'HorNet' and 'HorNet+' architectures manage real-time information exchange between control panels and by so doing allow complex cause-effect matrices to be created. 'HorNet' technology is used in SmartLoop series control panels, while 'HorNet+' technology is used in the Previdia series control panels.



Janus

Janus technology allows you to interface the world of Inim products with the outside world through an Ethernet connection and TCP/ IP protocol. By adding the TCP-IP modules based on Janus technology (SmartLAN and IFMLAN), the system becomes accessible and controllable (with the appropriate security levels) through any PC or SmartPhone connected to the Internet. It will be possible to interact with all the control panels in the network, in

fact, the SmartLAN, IFMLAN and Previdia-C-COM modules act as gateways capable of interconnecting each element of the Hornet or Hornet+ network to the outside world. In addition to the extended global reach of the system, Janus technology also allow you to send e-mails and UDP and TCP/IP protocol packets as well as allowing you to program all the control panels connected in the network from remote locations.



Emergency 54

An Inim system equipped with Emergency54 technology provides the highest degree of reliability an installer can expect from any fire detection system. Thanks to the sophisticated multi-processor architecture, this device, even in the remote possibility of a CPU fault, allows the activation of alarm signalling in the event of fire. Emergency54 operates both at control panel level to ensure the activation of alarm signalling also in the presence of a main CPU fault and at the network level by allowing remote

control panels to activate alarms also when the malfunctioning unit is part of a network. The functions of the Emergency54 also extend to communication procedures, in fact the remote communicator modules of Inim control panels are all based on autonomous microcontrollers capable of operating properly even when the main CPU fails. Emergency54 technology is used in the SmartLoop and Previdia Max series control panels.



Versa++

Inim has launched a whole new concept into the world of conventional detection: flexibility. In fact, as a result of the revolutionary Versa++ technology incorporated in the IRIS and ENEA detector ranges, you can now configure individual detectors to suit their specific environments.

You can also connect to the detector line for a complete diagnosis of each individual detector

and thus test its operating capacity, verify real-time values, view the contamination level in the optical smoke chamber and change the sensitivity and operating mode. Each detector has a non-volatile memory which allows you to view the smoke and temperature levels measured in the period prior to the last alarm detected. Versa++ gives you the true feel of the future of fire detection.



LoopMap

LoopMap technology is so new that it seems to have come out of the latest video-game. It is the apex of loop technology. Once the loop is connected to the control panel or loop pilot (EITK1000 or EITK2000), you simply start the enrolling process via your computer to obtain the loop layout containing all details and any secondary branches, in the order in which the

wiring was completed. LoopMap is capable of recognizing the wiring order of the loop devices even when the loop has branches. LoopMap technology allows you to reconstruct the exact installation topology and obtain an easy-to-use, interactive loop-layout map which greatly simplifies and speeds up searches relating to faults and maintenance work.



Cloud technologies

All the PREVIDIA series control panels can be connected to Inim Electronics Cloud Fire. The Cloud service applied to fire detection and alarm systems is completely free of charge. It allows two profiles, Installer and User, to remotely control their systems and overcomes all types of networking problems by making all the control panels reachable from any location. Additionally, the Cloud fire allows you to keep a continuously updated system log, as required by current legislation, on which all the events saved by the control panel (to which notes can be added and signed) maintenance and test

operations and any relevant event encountered by those responsible for security management are recorded (manual entries). Finally, Cloud fire records in detail the test operations performed on each individual detector and allows you to maintain a test report archive which can be consulted by both the installer and the user. It automatically provides diagnostic reports capable of indicating whether all periodic maintenance operations on each individual system element have been carried out, thus allowing the installer to make a work plan and the user to keep check on system maintenance.



The Previdia Series

PREVIDIA COMPACT





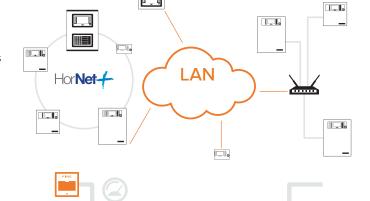




Previdia series control panels are characterized by a uniformity of technical features and a clear and intuitive user interface, they provide the sector professional with a scalable, intuitive and reliable tool with which to successfully face market challenges.

Networking

All the control panels can be interconnected together in a network through RS485 based connections (HORNET+ technology) or over TCP-IP networks: this allows the delocalized management of the entire system and achieves greater flexibility on the site of installation and greater overall reliability.



Extinction

All models manage gas shutdown systems; the control panels manage both multiple discharge zones from a single control panel (Previdia Max up to 24 channels) and the use of delocalized control panels capable of managing a single flood zone (Previdia Compact), however, interconnected together in the network.



Thanks to management of latest generation technologies, such as TCP-IP, 3G, wired telephone lines, WEB etc., systems based on control panels from the Previdia range are easily supervised remotely and guarantee complete control of the danger in every situation.







Inim Cloud Fire

All the Previdia series control panels can be connected to Inim Electronics Cloud Fire. The Cloud service applied to fire detection and alarm systems is completely free of charge. It allows two profiles, Installer and User, to remotely control their systems and overcomes all types of networking problems by making all the control panels reachable from any location. Additionally, the Cloud fire allows you to keep a continuously updated system log, as required by current legislation, on which all the events saved by the control panel (to which notes can be added and signed) maintenance and test

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Inim Fire App

Inim Fire is the free App that you can download from the iOS and Android stores, aimed at both professionals (installers and maintenance technicians) and end users (installation managers, security supervisors, etc.), it allows you to manage all Previdia series control panels that are connected to the Inim Electronics Fire Cloud.

Thanks to its simple, intuitive interface and the use of 'push notifications,' the Inim Fire App provides an instantly understandable overview of what is happening on all the systems you have access to. By simply tapping a few times on the screen, you can scroll through the details and navigate the status of each element of the system.



Certifications

All the components of the range are accompanied by certifications issued by the most prestigious certification bodies

in the field of fire detection and according to all applicable regulations:

| 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. | | | | | |

ANALOGUE-ADDRESSABLE DETECTION PREVIDIA MAX CONTROL PANELS







Previdia Max

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

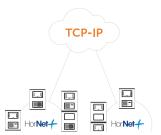
Thanks to a distributed-intelligence structure which uses a microprocessor inside each module, redundant microprocessors in the main unit and the possibility of having a backup CPU, Previdia Max guarantees unmatched

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.









The system



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) configured 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

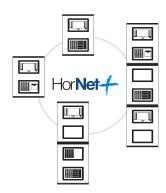
In order to expand the capacity of each control panel, several cabinets (maximum 4) can be assembled together to form a cabinet of increased dimensions.

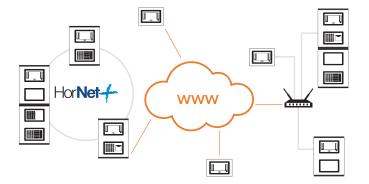
The cabinets can be assembled together by means of the mounting screws (supplied), once assembled the CAN DRIVE bars can be connected together using the wire (supplied). The assembled cabinets provide the respective number of housings for the front plate and CAN DRIVE bar modules.

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).







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

 $N^{\circ}1$ FPMCPU module – control unit with display

 $\ensuremath{\text{N}}^\circ \! 1 \, \text{IFM24160} - 4 \ensuremath{\text{A}}$ 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.



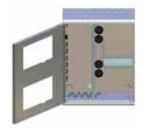
Accessory items

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 PREVIDIA 216 control panel and

several already-connected loop devices. Useful for technical trainings.



ORDER CODES

Analogue-addressable detection

ANALOGUE-ADDRESSABLE DETECTION PREVIDIA MAX CONTROL PANELS







FPM Modules



The modules from the FPM series are housed on the cabinet front plate, maximum 2 per cabinet.

FPMCPU

Main control unit for Previdia Max control panels. To be connected to the CAN DRIVE bar inside the metal cabinets and equipped with a graphic colour touchscreen. This device manages the control panel and coordinates the various function modules. A single Previdia Max control panel

can house 2 of these units (a main unit and a secondary unit as backup). Mounts to the front plate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.



Provides the following connections

Ethernet connection for networking and remote control

RS485 channel for repeaters (FPMCPU used as remote keypads - max. 14).

RS485 channel for interfacing with Building Management Software, supports MODBUS RTU protocol

Mini USB Port for configuration via PC

RS232 Port for configuration via PC

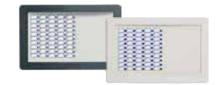
ORDER CODES

FPMCPU-L FPMCPU-G Light-grey coloured plastic. Dark-grey coloured plastic.

FPMLED

Module equipped with 50 configurable tricolour LEDs (green, yellow and red), it provides instant visual signals relating to the status of the various system elements (zones, points, etc.). It is to

be installed on the front panel and connected to the CAN DRIVE bar if housed in the upper slot, or connected to the FPM module if housed in the lower slot.



ORDER CODES

FPMLED-L FPMLED-G Light-grey coloured plastic. Dark-grey coloured plastic.

FPMLEDPRN

Module equipped with 50 tri-colour LEDs as per the FPMLED module and an 80mm printer. It provides real-time printouts of all system events. It is to be installed on the front panel and

connected to the CAN DRIVE bar if housed in the upper slot, or connected to the FPM module if housed in the lower slot



ORDER CODES

FPMLEDPRN-L FPMLEDPRN-G Light-grey coloured plastic. Dark-grey coloured plastic.

FPMEXT

LED signalling module for fire extinguishment systems If IFMEXT function modules are housed inside the control panel, it is mandatory to use one or more FPMEXT modules to visualize the status as indications separate from the display. Each FPMEXT module

provide the indications of 5 IFMEXT extinction modules.

Mounts to the front plate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.



ORDER CODES

FPMEXT-L FPMEXT-G Light-grey coloured plastic. Dark-grey coloured plastic.

FPMNUL

Blind module to be used to seal the apertures on the doors of the metal

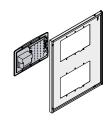
cabinet when certain functions are not required.



ORDER CODES

FPMNUL-L FPMNUL-G Light-grey coloured plastic. Dark-grey coloured plastic.





ANALOGUE-ADDRESSABLE DETECTION PREVIDIA MAX CONTROL PANELS







IFM function modules



IFM series modules are to be installed on the CAN DRIVE bar on the inside of the cabinets (max. 8 IFM modules per cabinet) depending on the required functions.

IFM24160

Switching power-supply module It connects to the mains power supply and supplies a maximum 4A current to the system. It houses a 1.5A battery-charger capable of maintaining under charge two 17Ah or 24Ah batteries. It has two supervised outputs and a configurable relay output (at factory default configured as Alarm

output, AUX output and fault signalling relay). It accepts 230Vac or 115Vac 50/60 Hz input voltage. Only one power supply module can be housed inside each metal cabinet. Each control panel manages a maximum of 4 power supply modules (one for each eventual cabinet).



IFM2L

Module for the management of two loops Each loop is capable of managing 240 devices. The module contains a step-up switching power-supply module for each Loop, capable of

maintaining the operating voltage (during alarm and stand-by conditions) at the set values. Each control panel manages up to 8 IFM2L modules



IFM4R

Configurable 4 Relay module Each relay supports a maximum load of 5A@MAX. 30V.

Each control panel manages a maximum of 16



IFM4IO

4 power input/output module Each of the 4 channels can be configured as:

- supervised output capable of supplying a maximum current of 1A@27.6V, configurable;
- supervised input capable of activating warning, pre-alarm and alarm signals, configurable;
- conventional zone capable of managing a
- line of conventional detectors, maximum 32 detectors, configurable;
- 4-20mA input capable of reading 4-20mA detector signals; settable intervention thresholds; configurable.



Each control panel can manage a maximum of 16 IFM4IO modules.

IFMDIAL

Remote dialer module communicates over the PSTN landline and GSM network, it is capable of sending voice calls resulting from on-board recorded messages and digital calls via the most widely used protocols (SIA, Contact ID, etc.).

This module is also capable of sending SMS messages with detailed texts relating to the saved events. Each control panel manages one IFMDIAL module only.

Note –GSM antenna not supplied. Available as an accessory: REM-ANT.



IFM1610

16 low-power Input/Outputs module Each channel can be configured as:

- digital input (non supervised) activated with voltage present;
- digital output (non supervised) capable of supporting a maximum load of 100mA@30Vdc.

Each control panel is capable of managing up to 4 IFM16IO modules.



IFMNET

Control panel to Hornet+ network connection module for the connection of one or more control panels in a Hornet+ network, up to a maximum of 48. This module provides two RS485 ports for connection to other control panels; the wiring is completed as closed ring. RS485 speed settable

from 9600 to 512k baud, a 12V output is provided for the power supply to eventual RS485 fiberoptic converters. Each control panel manages one IFMNET module only. All the interconnected control panels in the network must be equipped with an IFMNET module.



IFMLAN

Advanced TCP-IP service management module It allows a second connection of the control panel to the Ethernet network and provides the following services:

- web Server for system control, management and maintenance
- e-mails containing events details
- IP ONVIF camera interface for video verification
- remote communications via SIA-IP protocol
- BACnet* protocol (subject to licence)
- ESPA444 protocol
- management of voice evacuation systems



Each control panel manages one IFMLAN module only.

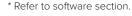
IFMEXT

Module for the management of a gas extinction channel. It provides terminals for the management of devices which are commonly requested in this type of installation together with the adequate activation logic. The various functions available on the terminals can be replicated on devices connected to the

loop (with the exception of the control of the electrovalve). Each control panel manages up to 24 IFMEXT modules. The modules must be associated with the FPMEXT signalling panel. Each FPMEXT module reports the visual signals of a maximum of 5 IFMEXT modules.



IFM module assembly











Voice evacuation systems



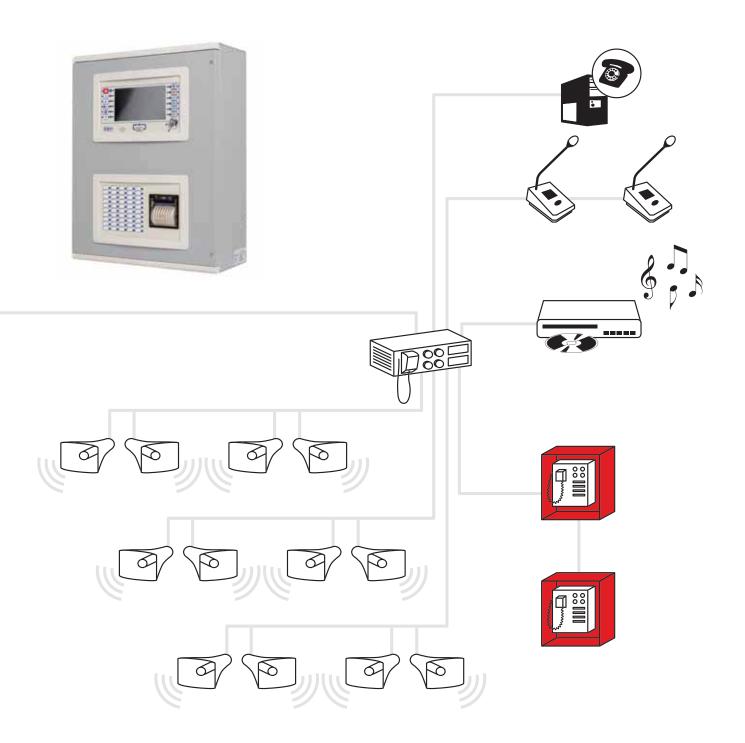
The growing demand for voice evacuation systems for use in conjunction with automatic fire detection and fire alarm systems has led Inim Electronics to sign cooperation agreements with some of the world's leading manufacturers of voice evacuation equipment.

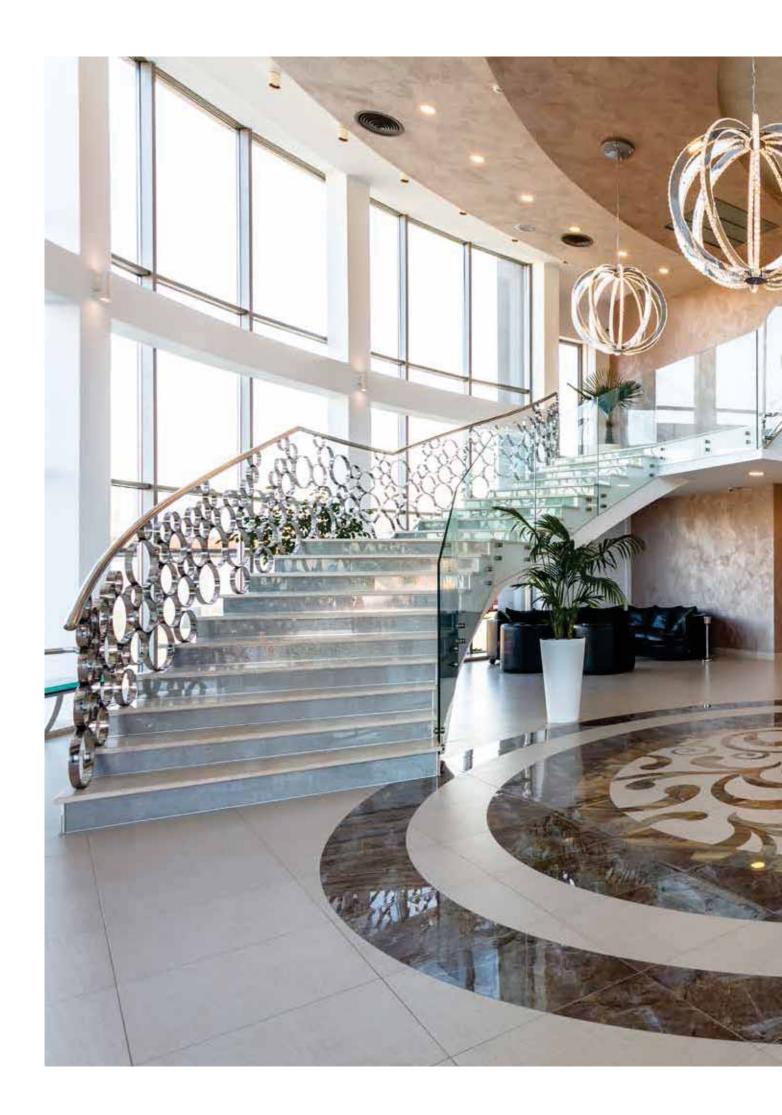
Within the scope of these agreements, Inim has developed an innovative communication BUS between Previdia Max and EVAC equipment that allows you to actually combine the two systems into a single system, thus providing a level of integration and interaction that has never been reached before. The addition of the voice evacuation system to the Previdia Max control panel via Inim's connection BUS, provides many advantages:

both systems can be supervised from a single point (even remotely)

- in the event of a fire emergency, routine sound diffusion (background music, commercial announcements) will be blocked instantly
- the appropriate messages can be played on each zone (Warning, Evacuation, End of emergency)
- it is possible to organize even complex evacuation plans, by outlining orderly, coordinated evacuation of the premises guided by the activation of appropriate messages to be broadcast in the various areas depending on the area where the danger is detected
- wiring, programming and maintenance are all greatly simplified.

For further details regarding the Inim Electronics' VOICE EVAC offer, please refer to the relevant catalogue.









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

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

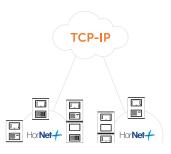
Previdia Compact is available in two sizes to suit different installation needs:

- Small, with 1.5A power supply and 7Ah batteries
- Large, with 4A power supply and 17 Ah 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.



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



ANALOGUE-ADDRESSABLE DETECTION PREVIDIA COMPACT CONTROL PANELS



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 | COLORE G = grey R = red |

| MODEL | LOOP CAPACITY | | | CABINET | | ZONE STATUS LED | EXTINCTION MANAGEMENT |
|---------|------------------------|------------------------|-------------------------|---|--|-----------------|-----------------------|
| | 1 LOOP OF 64 POINTS | 1LOOP OF 240 POINTS | 2 LOOP 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, it 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 Protocol for interfacing with control panels to pagers, third-party remote communicators | | |
|--|--------------------------|--|---|--|--|
| ESPA444 | YES | NO | | | |
| 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 Electronics 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 | | |

ANALOGUE-ADDRESSABLE DETECTION PREVIDIA COMPACT CONTROL PANELS



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

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 a 64-point loop, 1 x 240-point loop or 2 x 240-point loops depending on the model
- Multi protocol loop manages Inim, Apollo and Argus devices
- 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, for saving and retrieving configurations and saving the event log
- 4 on-board I/O channels configurable as 1A supervised power outputs, supervised inputs
- Configurable relay onboard

- 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.

Previdia/STUDIO

Programming and control software for Previdia control panels



The Previdia/STUDIO configuration and control software is an indispensable tool for the commissioning and maintenance of Previdia series control panels. Simple and easy to use, it allows you to quickly and effectively adjust the operating parameters of each individual element of the system, define the activation logics and configure the various system components. Capable of operating both at individual control panel and network level, it makes use of a graphic interface designed to be used also on touch screen devices. The software is completed with effective diagnostic functions that allow accurate fault searches and the adjustment of the various intervention thresholds. Equally as

effective are the reporting functions which allow, starting from the data automatically collected by the control panel, the creation of complete reports in compliance with current legislation. The software also manages a database that can collect and store the data of each completed installation including, for each customer, reports of all maintenance and tests carried out on the system. The Previdia/STUDIO software is capable of connecting to the system via RS232, USB or TCP/IP connection, runs in Windows operating systems and can be downloaded free of charge by logging in and registering on website www.inim.biz.

BACnet licence

BACnet is a building-automation-network communication protocol developed by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers). BACnet, as a result of its versatility and flexibility, is now extensively used as a standard communication protocol between devices and building-automation systems made by various manufacturers. The BACnet

protocol is implemented on the IFMLAN module for the Previdia Max control panels, its use is subject to licensing. Each license allows you to manage 500 points, to manage a greater number of points you must purchase more than one license. For 'point' we intend all those single objects that can be supervised through the BACnet protocol: Loop Devices, Zones, Inputs, Outputs, etc.

Inim Fire

App for management of Previdia control panels





Inim Fire is the free App that you can download from the iOS and Android stores and that allows you to manage all Previdia series control panels that are connected to the Inim Electronics Fire Cloud.

For professionals and end users

Inim Fire is aimed at both professionals (maintenance technicians, installers) and end users (installation managers, security supervisors, etc.). It offers essential functions for secure, fast and professional management of installations tailored to suit both categories.

PUSH notifications

The Inim Fire App is capable of sending real-time 'push' notifications to warn both users and maintenance technicians of any events recorded by a fire detection system.

Remote control of installations

Thanks to its simple, intuitive interface, the Inim Fire App provides an instantly understandable overview of what is happening on all the installations you have access to. By simply tapping the screen allows you to view the complete details of each report.

The App allows you to navigate amongst the various installations associated with your account and access the details of each individual control panel to the point of being able to supervise

and manage every single zone, detector or device in minimum detail.

ınım

The functions for remote control of alarm and fault communicators, timers, output groups etc., make the Inim Fire App a valuable tool for the remote management of all situations in total security.

Graphic maps

The Inim Fire App, in addition to its intuitive and captivating graphics, offers a graphical visualization based on navigable multiple-level topographic maps that show interactive, customizable icons that provide instant awareness of the status of each zone, detector or element of the system. The possibility to select an icon and issue commands to the

associated element as well as the possibility to set up function keys for fast actions are definable during the installation phase, thus making the lnim Fire App a revolutionary tool for worry-free management of fire systems.



Video verification

The Inim Fire App is capable of showing on your smartphone images captured by any IP camera installed on the site, thus offering a visual aid that allows you to verify instantly, effectively and in real time the extent and effective risk of the reported danger.

Thanks to ONVIF protocol management capabilities the control panels can communicate with any type of IP camera and, if necessary, control pan, tilt and zoom movements based on the location of the danger and then send the relevant image to your smartphone.



Events Log and Installations Registry

The Inim Fire App allows you to view both the events log, which contains all the events recorded in detail by the control panel, and the 'installations registry' in which converge all the most significant automatically-recorded events (alarms, faults, bypass operations, etc.) and any events entered manually by users and maintenance technicians (maintenance operations, tests, fire drills, personnel training sessions, faults, etc.).

Each element in the 'Installations registry' can be commented on by a series of notes and closed with a virtual signature that permanently archives the event.

The 'Installation registry,' which can be printed out on paper and countersigned by downloading it from the Inim Fire Cloud web page, faithfully coincides with the requirements of current legislation, allowing both the professional and the end user to promptly comply with the current obligations determined by law without any particular effort.

Walk test

Thanks to a revolutionary guided and assisted walk test function, once the zones to be tested have been selected, the Inim Fire App will show a list of the devices associated to each selected zone with the possibility for each of them of lighting up LEDs for the localization, testing of detectors, inputs and outputs and will automatically tick the tested devices.

An ingenious function that allows the professional to carry out periodic test operations quickly and without risk of forgetting even a single element.

Maintenance Report Management

At the end of each periodic test or ordinary/extraordinary maintenance session, the professional will be able to compile and archive the relative report on the Cloud as required by current legislation. This can be done by simply downloading and filling in the forms required by law available on the App, or any

other file compiled from a PC or photo of the paper document. The document thus archived will be completed by the Cloud by adding the automatic registration of all tested devices and then entered in the Installations registry in compliance with the legal obligations in force.















ANALOGUE-ADDRESSABLE DETECTION SMARTLOOP CONTROL PANELS



SmartLoop

Networkable analogue-addressable fire alarm control panel with 1 loop expandable to 8











SmartLoop-P

SmartLoop-G

The SmartLoop series of analogue addressable fire control panels marks a clear evolution from previous generations. It offers control panels that provide from 1 to 8 loops which can be connected in a network of up to 30 control panels.

Considering that each control panel can manage up to 8 loops and that each loop can manage up to 240 devices, the enormity of installation solutions offered by the SmartLoop system is not difficult to imagine. The SmartLoop series has been specially designed to provide enhanced features, best-in-class performance, simple end-user operation and trouble-free installation, all with the aim of helping the installer company to improve efficiency. These first-rate features have been made possible by the appliance of multiprocessor architecture with self-diagnosis features coordinated by a 32 bit processor. This impressive hardware podium provides the processing resources necessary to ensure the highest levels of reliability, response speed, easeof-use, connection simplicity, enhancement opportunities and flexibility. The operational superiority of the SmartLoop system is rooted in the synergy of various state-of-the-art technologies: OpenLoop technology; HorNet token-ring technology; Emergency54 technology and Janus technology (refer to the 'Technologies' section for details). The SmartLoop control panel has 5 supervised outputs for alarm and fault signaling (the efficiency of these outputs is monitored continuously). It can identify and

diagnose anomalous conditions and provide an ample spectrum of visual signals: alarm, pre-alarm, fault, early warning, bypass, test, monitor. All system status signaling is indicated on the display and on the system status LEDs. In addition to the supervised outputs, this control panel provides two relays for alarm and fault signaling and also an output for battery shutdown signaling. If you wish to increase the number of on-panel inputs and outputs, you can install a 6-terminal SmartLoopINOUT expansion board. This important feature is yet another innovation pioneered by Inim. In fact, each of the 6 added terminals can be set up to operate as either a supervised output, a supervised input or a conventional detector zone. These 'three-option' terminals abolish the inflexibility normally found in conventional input/output expansion boards, and also allow the control panel to manage zones with conventional detectors. The SmartLoop system provides an RS485 BUS for remote-control Repeater panel connections. Two Repeater models are available: SmartLetUSee/LCD with display; SmartLetUSee/LED with status LEDs. Repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level. The RS485 BUS also accepts and manages a fire extinction control panel. Two models are available: SmartLine020-2EXT (single channel); SmartLine036-4EXT (single channel).

These fire extinction control panels are conventional panels from the SmartLine series and are equipped with a SmartLetLoose/ONE fire extinction board. All the control panels from the SmartLoop series support the SmartLoop/ PSTN board which provides voice and digital dialler functions. Programming the system from the control panel is straightforward and troublefree thanks to the easy-to-follow instructions on the display. The time-saving Self-Addressing feature (for the loop devices) simplifies the procedure even more. The system can also be programmed using SmartLeague software application (runs under Windows) which offers an easy-to-use graphic interface. This method will allow the installer to program the system on a home or office computer and download the pre-set data at a later time via RS232, USB or Ethernet (for SmartLAN enhanced systems).

The SmartLeague's simple 'drag and drop' operations will allow you to enjoy the convenience and ease of configuring the system with the visual help of a virtual system. The right-across-the-range components, reduced-complexity firmware, and optimized remote programming and diagnostic features keep the technicians time on site to a minimum. The simple installation of the components, the reduced complexity of the interface, the remote programming and diagnostic procedures ensure that the time spent on installation is reduced to a minimum. This combined with the features of scalability, modularity, flexibility and versatility make control panels from the SmartLoop series the ideal solution for various market segments: from medium commercial applications to large installations such as hospitals, shopping malls and airports.



Main features

- Analogue-addressable fire control panel
- 2 loops expandable to 8 for 2080 expandable models, 1 loop on non-expandable 1010 models
- All models in the SmartLoop series are EN54 Approved
- Multiprocessor hardware structure
- 32 bit main CPU
- OpenLoop Technology
- 'HorNet' network architecture between control panels
- Supports Emergency54 emergency configuration (CPU redundancy)
- Up to 30 control panels in the network using the SmartLoop/NET network board
- Accessible over the Internet via a SmartLAN board (optional)
- 2 or 4 wire loop connection
- Supports 240 devices per loop
- Up to 14 remote control panels (repeaters) connectible to the RS485 interface at a maximum distance of 1000m
- 1 supervised alarm output (NAC)
- 1 supervised fault output (NAC)
- 3 programmable supervised outputs (NAC)
- 1 alarm relay
- 1 fault relay
- RS485 BUS for the connection of remote control panels (SmartLetUSee/LCD and SmartLetUSee/LED)
- Manages via RS485 BUS SmartLine020-4EXT and SmartLine036- Dimensions (HxWxD): 480x470x135 mm. 4EXT extinction control panel
- Manages power stations on RS485 BUS
- 124V auxiliary power-supply output for external devices
- 124V resettable ancillary power output

- Battery shutdown relay for deep discharge conditions
- RS232 and USB connectors for the connection of a PC
- RS232 connector for the connection of a serial printer
- Memory of the last 2000 events
- Self-enrolling of loop devices
- Self-addressing of loop devices
- Manages conventional detectors (through SmartLoop/INOUT board)
- Emergency phone call (through SmartLoop/PSTN board)
- Large backlit alphanumeric display for easy management of Installer/ User interface
- Navigation keys for easy access to menu functions
- Fast access keys (test, buzzer, recognition, silence, reset, evacuate)
- Signalling buzzer
- Programming software runs in Windows environment
- Programming from front panel
- Code or key access to Level 2 functions (EN54 compliant)
- Control of the output voltage of the power supply section in accordance with the battery temperature read by the ProbeTH device
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac \pm 10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Weight (without batteries): 8 Kg

ORDER CODES

| SmartLoop1010/P | Control panel with 1 loop, non-expandable, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer. |
|-----------------|---|
| SmartLoop2080/P | Control panel with 2 loops expandable to 8, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer. |
| SmartLoop1010/G | Control panel with 1 loop, non-expandable, equipped with command keypad and display. |
| SmartLoop1010/S | Control panel with 1 loop, non-expandable, with enquipped flush front plate. |
| SmartLoop2080/G | Control panel with 2 loops, expandable to 8, equipped with keypad and display. |
| SmartLoop2080/S | Control panel with 2 loops, expandable to 8, with enquipped flush front plate. |

ANALOGUE-ADDRESSABLE DETECTION SMARTLOOP CONTROL PANELS





SmartLoop system enhancement devices connectable on the RS485 BUS

SmartLetUSee/LCD - Remote LCD repeater panel

THIS LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel. They should be located in places where it is necessary to provide the possibility of control and visualization.

Each SmartLoop control panel manages up to 14 repeaters that can be connected up to a distance of 1000 m from the control panel. The connection with the control panel is established via the RS485 BUS present on the motherboard of the control panel.



SmartLetUSee/IP – IP remote control software for SmartLoop panels

The SmartLetUSee IP software is an application that replicates the front plate of the SmartLoop control panel on the PC screen. Communication between the application and the control panel is achieved via TCP-IP protocol, therefore, the SmartLoop

control panel must be equipped with a SmartLAN or SMartLAN/SF board and connected to an Ethernet network. The application replicates all the functions available on the front plate of the control panel, thus providing a repeater panel directly on a PC or Tablet.



SmartLetUSee/LCD-RK - Remote LCD Repeater panel - 19" Rack Mount

THIS LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel and is suitable for 19" rack mounting. This device occupies 5 rack units. Each SmartLoop control

panel manages up to 14 repeaters that can be connected up to a distance of 1000 m from the control panel. The connection with the control panel is established via the RS485 BUS present on the motherboard of the control panel.



SmartLetUSee/LED - Remote LED repeater panel

IT is a LED display panel. The panel provides 48 freely-programmable LEDs capable of signalling conditions generated by the loop points, control panel zones or the system as a whole (alarms, pre-alarms, trouble, etc.). Each LED can be characterized by a label for easy identification of the status it is associated with.

This device connects to SmartLetUSee/ LCD Repeater panel by means of a flat cable (included) and together they provide maximum system control and visualization capacities.



SmartMimic - Synoptic panel board

This board allows you to create a synoptic panel. All you need to do is attach a map (layout) of the protected premises to the front of any ordinary enclosure, perforate the map (layout) in the places where the zones are located, then

wire up the LEDs using the wires supplied with the board. The board connects to the RS485 BUS port of the SmartLoop control panel and provides 48 connections for the LED wires.



SmartLoop/REL - 12 relays expansion module

The SmartLoop/REL board connects to the RS485 BUS of SmartLoop control panels to provide 12 configurable relays. Relays from 1 to

10 are capable of switching a maximum load of 30Vdc, 1A. Relays 11 to 12 are capable of switching a maximum load of 240Vac, 5A.



SmartLoop system enhancement devices connectable on the SmartLoop mother board

SmartLoop/2L - OpenLoop expansion board

Each expansion board adds 2 OpenLoop loops to the control panel thus offering the possibility to expand each control panel up to a maximum of 8 loops. Up to 3 loop expansion boards can be configured for each control panel. Being OpenLoop technology, each loop can be

configured to work independently with one of the types of devices available. These boards can only be added to expandable models (2080 models) and are not configurable in nonexpandable models (1010 models).



SmartLoop/INOUT - Input and output expansion board

Adding this card to the control panel provides a further 6 terminals. Each terminal can be set up to operate as either a supervised output NAC (1A max.); supervised input or input line (zone) for conventional detectors. The output

trigger signals and the actions generated by the activation of the inputs are fully programmable.



SmartLoop/NET - SmartLoop HorNet network board

The network can be made using 3-pole cable ring wiring. Each section (from control panel to control panel) can have a maximum length of 2000m. The network created in this way provides a highly fault-tolerant network. Using a supplementary 2 pole cable (5 poles in all), it is

possible to create a protection ring which can pass alarm conditions coming from a fire control panel with a microprocessor fault, through the ring thus ensuring maximum reliability (Emergency54 technology).



SmartLoop/PSTN - PSTN Voice and digital dialler

The SmartLoop/PSTN board allows the SmartLoop fire control panel to use the land line (PSTN). It manages (and monitors) 2 lines and uses the most widely used reporting protocols (SIA, Contact ID, etc.). The board has an 8 slot audio memory for up to 8 voice-call messages. The two phone lines are monitored and guarantee signalling in the event of line down faults. Completely managed by its own

microcontroller, it guarantees an emergency call in the event of a control panel microprocessor fault. THE emergency call is also guaranteed if an alarm occurs when the control panel microcontroller is faulty (Emergency54 technology).



SmartLAN - Ethernet interface for Internet via TCP-IP and UDP

The SmartLoop/LAN board connects to any Ethernet network and allows remote access (via Internet) to the control panel and to all the connected control panels in the HorNet network. The board is capable of sending detailed e-mails for each event and real-time event reports via TCP/IP.

The board also provides the possibility to carry out remote programming (up-downloading) of data, of managing the system via the SmartLook control software, as well as providing a web server which allows access to the control panel via the Web.



SmartLAN/SF – Ethernet interface for remote programming

The SmartLAN/SF board connects to any Ethernet network and allows remote access (via Internet) to the control panel and to all control panels present in the HorNet network. The board provides the possibility to carry out

remote programming (up-downloading) of data and of managing the system via the SmartLook control software. Supports Modus over TCP/IP



SmartLoop/PRN - On-front Printer Module

The SmartLoop/PRN printer module is installed on the front plate and is connected, via the cable supplied, directly to the main board of the control panel. It uses 56mm thermal roll paper. The SmartLoop/PRN allows real-time printing of events or on-demand printing of portions of the control panel event log. IT can

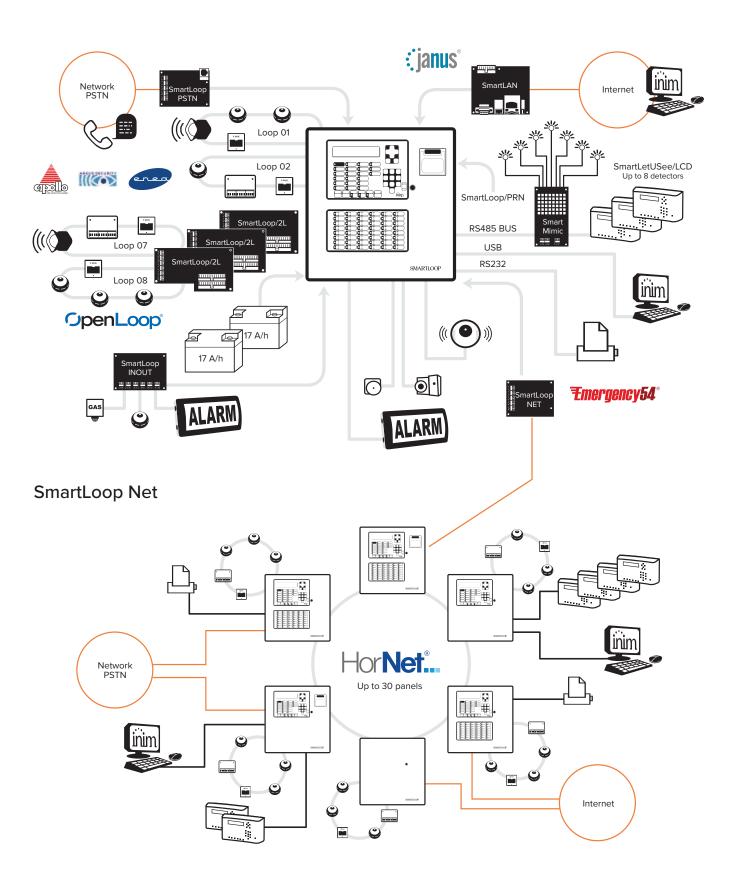
also print complete loop reports containing information about dust accumulation and detector functionality. The SmartLoop/PRN can be mounted to SmartLoop1010P and SmartLoop2080P models only.



| | By design | | Optional attachment boards | | | | | |
|----------------------|----------------------|-----------------|----------------------------|------------------|--------------------|------------------|-------------------|-------------------------|
| Control panel models | Panel LCD display | Panel 48 LED | SmartLoop 2L | SmartLoop PRN | SmartLoop INOUT | SmartLoop NET | SmartLoop PSTN | SmartLAN SmartLAN/SF |
| SmartLoop/1010 - P | Yes | Yes | - | Yes | Yes | Yes | Yes | Yes |
| SmartLoop/2080 - P | Yes | Yes | Yes (max. 3) | Yes | Yes | Yes | Yes | Yes |
| SmartLoop/1010 - G | Yes | - | - | - | Yes | Yes | Yes | Yes |
| SmartLoop/2080 - G | Yes | - | Yes (max. 3) | - | Yes | Yes | Yes | Yes |
| SmartLoop/1010 - S | - | - | - | - | Yes | Yes | Yes | Yes |
| SmartLoop/2080 - S | - | - | Yes (max. 3) | - | Yes | Yes | Yes | Yes |



SmartLoop Panel overview



| Technical specifications | |
|---|-----------------------------|
| Operating voltage | 230 Vac -15% + 10% 50/60 Hz |
| Maximum internal power current | 4 A |
| Max current available for the external load (loop devices, external loads, attachment boards, etc.) | 4 A |
| Battery specifications | 12V @ 7Ah o 12V @ 17Ah |
| Operating temperature | From -5° to +40° C |
| Dimensions (HxWxD) | 48cm x 47cm x 13.5 cm |
| Weight (without batteries) | 8 Kg |

| Absorbed current by accessory boa | ards |
|-----------------------------------|-------------------------|
| SmartLoop/2L | stby: 20mA MAX.: 70mA |
| SmartLoop/INOUT | stby:40mA MAX:300mA |
| SmartLoop/NET | stby:40mA MAX:40mA |
| SmartLoop/PSTN | stby: 20mA MAX.: 60mA |
| SmartLAN | stby: 200mA MAX.: 200mA |
| SmartLAN/SF | stby:40mA MAX:40mA |
| SmartMimic | stby: 5mA MAX.: 50mA |
| SmartLoop/LED | stby:40mA MAX:80mA |
| SmartLoop/PRN | stby: 0 MAX.: 1A |
| SmartLetUSee/LCD | stby: 40mA MAX.: 50mA |
| SmartLetUSee/LED | stby: 5mA MAX.: 50mA |
| | |

SmartLeague programming software

The completely-overhauled SmartLeague management and programming software is an indispensable tool for all those professionals who require full control of fire detection systems. In addition to allowing fast configuration of

the control panel parameters, it offers an overview of the system and provides wiring diagrams of the various terminals in function of the set options



ORDER CODES

SmartLoop1010/P Control panel with 1 loop, non-expandable, equipped with command keypad, display, status LEDs

and housing for SmartLoop/PRN printer (accessory item).

SmartLoop2080/P Control panel with 2 loops expandable to 8, equipped with command keypad, display, status LEDs

and housing for SmartLoop/PRN printer (accessory item).

SmartLoop1010/G Control panel with 1 loop, non-expandable, equipped with command keypad and display.

SmartLoop2080/G Control panel with 2 loops, expandable to 8, equipped with command keypad and display.

SmartLoop1010/S Control panel with 1 loop, non-expandable, with enquipped flush front plate.

SmartLoop2080/S Control panel with 2 loops, expandable to 8, with enquipped flush front plate.

SmartLetUSeeLCD Remote LCD repeater panel.

SmartLetUSeeLCD/RK Remote LCD Repeater panel – 19" Rack Mount.

 SmartLetUSeeLED
 Remote LED Repeater panel.

 SmartLoop2L
 OpenLoop expansion board.

 SmartLoopINOUT
 Input and output expansion board.

SmartLoopNET Board for the connection of SmartLoop control panels in a HorNet network.

SmartLoopPSTN Land line digital and voice dialler board.

SmartLoopPRN On-panel printer module.

SmartLAN Ethernet interface for connection to the Internet via TCP/IP for remote programming and monitoring purposes

and Web server.

SmartLAN/SF Ethernet interface for Internet connections over TCP-IP and remote programming and supervision.

SmartMimic Synoptic board

SmartLine020/4EXT Single-channel fire suppression control panel with 4 conventional zones expandable to 20.

SmartLine036/4EXT Single-channel fire suppression control panel with 4 conventional zones expandable to 36.

SmartLeague Programming and management software for Inim products (runs on Windows").

Link232F9F9 RS232 connection cable between PC and Inim device.

ProbeTH Thermal probe - protects the battery against overheating and consequent permanent damage.

SPS24060G - SPS24060S Power-supply station @ 24V, 1.5A.
SPS24160G - SPS24160S Power-supply station @ 24V, 4A.





ANALOGUE-ADDRESSABLE DETECTION SMARTLIGHT CONTROL PANELS



SmartLight

Single loop analogue-addressable fire detection control panel





The compactness, simple end-user operation, trouble-free installation and uncomplicated programming procedures make this highly competitive control panel ideal for small applications that require first rate performance. It is exactly this market segment that the SmartLight control panel finds its niche. It is perfect for those applications which require a limited number of detectors yet call for the reliability and performance that only analogue-addressable systems can provide. With this application typology in mind, SmartLight is a valid alternative to conventional systems.

The SmartLight control panel is based on OpenLoop technology. Thanks to the many protocols supported by its detection Loop, SmartLight is capable of managing a wide range of detectors and accessory devices and thus offers maximum flexibility and ease-of-use.

LOOPMAP and VERSA++ technology combined with ENEA series devices make this control panel a state-of-the-art tool which forms the basis of secure, professional installations capable of

satisfying every need. SmartLight provides 2 supervised alarm outputs (alarm and fault) for the connection of audible-visual signaling devices, a power-supply output for ancillary devices and an output for the activation of external dialers. The control panel manages an ample spectrum of status signals: alarm, pre-alarm, early warning, fault, monitor, bypass, test, etc.

SmartLight manages an RS485 BUS for remote connections.

The BUS supports 4 remote repeater panels (SmartLetUSee/LCD-Lite) which replicate all the fire-alarm system data and control panel functions. The BUS also supports 2 power-supply stations and allows the control panel to supervise their functions and activate (or deactivate) their outputs during predefined conditions. Programming the system from the front plate is simple and intuitive thanks to the graphic display. However, it is possible to configure the control panel from a PC via an RS232 serial connection, the simple and intuitive SmartLeague configuration software greatly speeds up the commissioning of the system.

Accessory items

SmartLetUSee/LCD-Lite

Remote repeater panel equipped with display and user-interface keypad (up to 4 for each control panel).

SmartLetLoose/ONE

Fire extinction board. Provides control panel with a Fire Extinction Gas control capabilities. Certified CPD – EN12094-1.

SmartLevel

Power-supply station connectable to the RS485 BUS (for monitoring and management of the control panel power-supply-station outputs) – For details refer to 'Power-supply stations' section.







Main features

- Single-loop analogue-addressable control panel
- Certified EN54-2 / EN54-4
- Certified EN12094-1 (Fire extinction)
- OpenLoop Technology (multiprotocol)
- VERSA++ Technology (ample range of sensitivity and operative modes)
- LOOPMAP Technology (automatic wiring reconstruction and addressing capabilities)
- Supports 240 devices (64 for 'S' model)
- Manages 30 zones (16 for 'S' model)
- Manages SmartLetLoose/ONE Fire Extinction board (EN12094-1 compliant accessory item)
- Supports 4 remote repeater panels
- Supports 2 power-supply stations (SmartLevel)
- 1 supervised alarm output (NAC)
- 1 output for communication device activation (dialers)
- 1 supervised fault output
- 1 dry-contact fault output
- 1 power-supply output for external devices
- Battery shutdown relay for deep discharge conditions
- Backlit graphic display for easy management of installer/user interface
- Navigation keys for easy access to graphic display functions

- Fast keys (Silence, Reset, Evacuate, Investigate)
- RS485 BUS for repeater panel and power-supply station (SmartLevel) connections
- Signalling buzzer
- 8 Timers
- 8 logical equations
- RS232 connector for programming via PC
- Programming software
- Easy system programming from the control panel
- Access key for level 2 functions (EN54 compliant)
- Battery charge optimization (via thermal probe)
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac
- Switching power supply/battery charger 1.4A @ 27.6Vdc
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325 x 325 x 80 mm
- Weight (without batteries): 3 Kg

ANALOGUE-ADDRESSABLE DETECTION SMARTLIGHT CONTROL PANELS



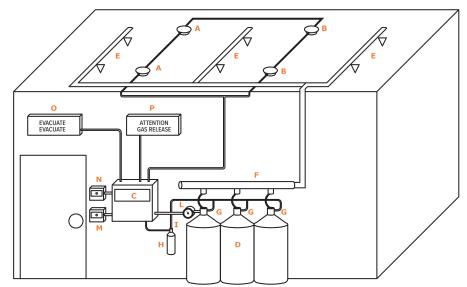
Extinguishment

The addition of a SmartLetLoose/ONE fire extinction board to any SmartLight series fire control panel provides the system with GAS extinction control capabilities compliant with EN12094-1. The control panel provides all the functions required by law and

allows the connection of the various accessories necessary for the management of a fire extinction system (refer to 'Accessory items for fire extinction systems').

DIAGRAM KEY

- A Loop (zone A)
- B Loop (zone B)
- C SmartLight fire extinction control panel
- D Extinguishing gas cylinders.
- E Gas release nozzles
- F Gas collectors
- G Pneumatic release valve
- H Pilot cylinder for gas release
- Pilot cylinder electrovalve
- L Pressure switch
- M Manual activation button
- N Stop extinction button
- Audio/Visual signaller of imminent gas release
- P Audio/Visual signaller of gas present



Application diagram

Main features

- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Signalling LEDs (status, disabled, faults)
- Supervised terminals for manual fire extinction commands
- Supervised terminals for STOP fire extinction commands
- Supervised terminals for pressure switch control
- Supervised output for fire suppression system activation
- Supervised output for the activation of pre-extinction signalling devices
- Supervised output for activation of extinction-in-progress signalling devices.

ORDER CODES

SmartLight/G Single loop analog-addressable control panel. Up to 240 devices over the loop and 30 zones.

SmartLight/S Single loop analog-addressable control panel. Up to 64 devices over the loop and 16 zones.

SmartLetLoose/ONE Extinction board

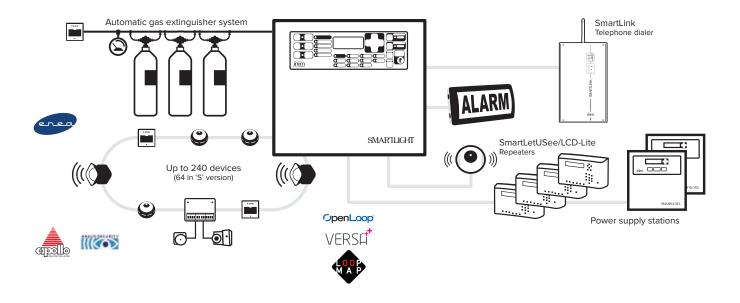
SmartLetUSee/LCD-Lite Remote-control repeater panel for SmartLine and SmartLight control panels.

SmartLeague Programming and management software.

Link232F9F9 RS232 connection cable between PC and Inim devices. **IPS24060G** Power supply module 1.5A @ 27.6Vdc.

ProbeTH Thermal probe - protects the battery against overheating and consequent permanent damage.

Application diagram



Programming software SmartLeague

The completely-overhauled SmartLeague management and programming software is an indispensable tool for all those professionals who require full control of fire detection systems. In addition to allowing fast configuration of the control panel parameters, it offers an overview of the system and provides wiring diagrams of the various terminals in function of the set options.



ANALOGUE-ADDRESSABLE DETECTION FNFA

EN 54-7 EN 54-5 EN 54-3 EN 54-17

Enea

Addressable analogue detectors





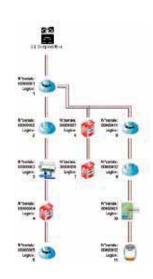
ENEA series detectors, as a result of advanced technologies based on new-generation microprocessors, represent the most advanced technology that fire detection equipment can offer. They provide a vast spectrum of options and flexible functions, all configurable from the control panel (Versa++ technology). ENEA series detectors are capable of implementing a sophisticated set of algorithms, custom created by Inim's R&D professionals, which ensure unequaled reliability and the highest immunity to false alarms.

Thanks to Inim's leading-edge LoopMap technology, you can now connect to the control panel by means of a computer or EDRV1000 driver and reconstruct the exact installation topology and obtain an easy-to-use, interactive loop layout map which greatly simplifies and speeds up searches relating to faults and maintenance work. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service. And, therefore, hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

Main features

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen.
- Tri-colour LED: red for alarm, green for standby flashing (optional) and for localization by means of manual activation from the control panel, yellow for fault (chamber contamination, short circuit isolator)
- Integrated short-circuit isolator in each device
- Up to 240 devices connectable to the loop
- Automatic addressing (each device is identified by a factory-assigned serial number)
- Supervised remote output configurable from the control panel
- Automatic recognition of remote signaller connection.
- Drift compensation for sensor drift caused by dust in the chamber

- Sensitivity selection for smoke and heat thresholds
- Operating mode selection (for ED300 version): only smoke, only heat
- AND mode, OR mode, PLUS mode
- Complete diagnostics: view the contamination level in the optical chamber and verify realtime values.
- Memory of the smoke and temperature levels measured in the five-minutes period prior to the last alarm detected
- Vast range of settable options
- Bypass plate on the base to give continuity to the line in the event of removal of a detector, possibility to test loop wiring continuity.





| Parameter | ED100 | ED200 | ED300 | |
|-----------------------------|--------------------------------|---|--|--|
| Operating voltage | 19-30 Vdc | | | |
| Standby current consumption | 200 uA | | | |
| Alarm current consumption | Max. 10mA | | | |
| Sensitivity | 0.08 - 0.10 - 0.12 - 0.15 dB/m | A1R (58°C + RoR) – B (72°C) – BR (72°C + RoR) – A2S (58°C) | 0.08 - 0.10 - 0.12 - 0.15 dB/m A1R (58°C + RoR) - B (72°C) - BR (72°C + RoR) - A2S (58°C) AND - OR - PLUS Mode | |
| Operating temperature | -5°C + 40°C | | | |
| Height (base included) | 46 mm | 46 mm 54 mm | | |
| Diameter | 110 mm | | | |
| Weight (with base) | 160 g | | | |
| Weight (without base) | 90 g | | | |

ED100 – Optical smoke detector

The ID100 optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed

upper-part and 500 μm holes diameter mesh insect screen ensure high immunity to false alarms. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m - 0.10 dB/m - 0.12 dB/m - 0.15dB/m).







ED200 - Heat detector

The detector can be set in the following modes: A1R (fixed threshold at 58°C with thermovelocimetric detection), B (fixed threshold at 72°C), A2S (fixed threshold at 58°C), BR (fixed threshold at 72°C with

thermovelocimetric detection). As a result of its high flexibility this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.







ED300 - Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving inflammable

liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on the control panel by selecting from the following:







ANALOGUE-ADDRESSABLE DETECTION FNFA

EN 54-7 EN 54-3 EN 54-5 EN 54-1 EN 54-11 EN 54-1

- PLUS Mode (set at factory): the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to the maximum value. This operating mode, characterized by high sensitivity, allows detection of fast burning blazing fires (for example, fires involving inflammable liquids such as alcohol).
- OR Mode: the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). This operating mode, characterized by discrete sensitivity analysis, allows
- the detector to sense fires with a high emission of smoke and low heat output (for example, smouldering fires) and also fires with low emission of smoke and high heat output (for example, burning chemicals).
- AND mode: the detector will trigger an alarm only when the set smoke and heat thresholds (configurable as per the ED100 and ED200) are exceeded at the same time. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- SMOKE Mode: the detector will operate as per the ED100.
- **HEAT Mode:** the detector will operate as per the ED200.

Bases



EB0010 - Detector mounting base

Detector base for IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.



EB0020 - Relay base

The base is equipped with a relay activated by the detector.



EB0030 - Deep base

Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under the detector base, h 34mm.



EB0040

Base protected against dripping water when tilted up to 15 degrees max.

Black plastic and wood-look enclosures available on request for quantities.



EB0050

EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



EB0060

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

* Not for EU market.

Modules

EM312SR – Input output module

The EM312SR connects directly to the loop and is equipped with a supervised input (capable of controlling the status of external devices), a supervised output (capable of driving of one or more

audible/visual signalling devices) and a voltage free output (capable of driving all types of external devices, for example, electromagnets, etc).





- 1 supervised input
- 1 supervised output
- 1 supervised input for the activation of the devices connected to the output
- 1 voltage free output

- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factoryassigned serial number)

EM110 - Input module

The EM110 connects directly to the loop and is equipped with a supervised input

(capable of controlling the status of external devices).



- 1 supervised input
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)

EM411R - Conventional zone interface module

The EM411R zone interface connects directly to the loop and allows conventional zones

(maximum 32 devices) to be interfaced to Inim's addressable analogue systems.



- 1 conventional line input
- 1 relay output (2 voltage-free contacts)
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)

EU311 – Micromodule

The EU311 micromodule, due to its reduced-size, can be housed directly inside the enclosure of the device it controls (call point, sounder/flasher, beam detector, etc.), it connects directly to the

loop and is equipped with a supervised input (capable of controlling the status of a device), a loop-powered output (capable of driving of one audible/visual signalling devices).





- 1 supervised input
- 1 loop-powered output
- Built-in short-circuit isolator
- Automatic addressing (each device is identified by a factory-assigned serial number)

| | EM312SR | EM110 | EU311 |
|-----------------------------|------------|------------|------------|
| Operating voltage | 19 – 30Vdc | 19 – 30Vdc | 19 – 30Vdc |
| Current draw during standby | 80 uA | 80 uA | 80 uA |
| Current draw during alarm | 20 mA | 20 mA | 20 mA |
| Height | 53 mm | 53 mm | 37 mm |
| Width | 100 mm | 100 mm | 40 mm |
| Depth (including terminals) | 29 mm | 29 mm | 15 mm |
| | 66 g | 66 g | 15 g |

EM3xx – Multi Input/output module and conventional line interface

The module connects to the loop and provides different inputs and outputs depending on the model (see table). In the versions with 4 inputs, 2 of them can be configured as conventional line interface

powered from loop or from a local power supply. The 4 outputs are, depending on the model, supervised for the management of audible/visual signallers or dry contacts.





| Model | Inputs (selectable as conventional zone) | Outputs |
|--------|--|------------------|
| EM344S | 4 (2) | 4 (supervised) |
| EM344R | 4 (2) | 4 (voltage free) |
| EM340 | 4 (2) | // |
| EM304S | // | 4 (supervised) |
| EM304R | // | 4 (voltage free) |

ANALOGUE-ADDRESSABLE DETECTION ENEA

EN 54-7 EN 54-5 EN 54-3 EN 54-17 EN 54-18

EM500 – Module for the creation of synoptic panels for fire-detection control panels from the Presidia range

The EM500 consists of two separate units (both supplied):

EM500 module — Connects to and feeds directly from the loop, provides 8 LED driver connectors (supplied) and 5 input terminals. Each of the 8 LEDs can be configured to activate in response to any condition, each of the input terminals can be used for any function.

The EM500-EXP expansion module

Connects to the EM500 module via a connection wire (supplied) and adds a further 24 LEDs (supplied). Each LED is configurable, requires ancillary power supply voltage (24Vdc).





Manual call points

EC0011E - Outdoor manual call point (IP67)

- Addressable call point
- Manual call point with resettable element. Weatherproof to IP67, suitable for outdoor installation.

•



EC0020 – Manual call point

- Manual call point with resettable element operated by plastic key (included)
- Activation condition indicated by coloured flag and LED $\,$





EM600 - HUSH BUTTON - Home mute button

The EM600 module (HUSH BUTTON) finds its ideal collocation in residential installations and in applications where a control panel is installed for the protection of an entire apartment block with detectors inside each separate unit. Installation of an EM600 button inside each unit provides only the unit occupants with a voice message alert in the event of a smoke alarm and possible danger. In this way, should a false alarm occur, triggered perhaps by activities such as cooking in the kitchen, the unit occupants have the possibility to silence the alarm, remove its cause and open a window for several minutes in order to ventilate the room.

Occupants can silence an alarm inside their unit for three consecutive times after which a message is broadcast to all the units in the building. Additionally, as a way of preventing false alarms caused by cooking-generated smoke, unit occupants can simply press their HUSH BUTTON and disable smoke detection before starting their cooking activities. Clear and intuitive voice messages guide the building occupants throughout the various phases.



Remote indicators

IL0010 – Remote indicator

Remote fire-warning indicator





Visual/Audible signalling devices

ESS022* – Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling and EN54-23 certified visual signalling Comes with 'Fire alarm' written on it, available with different indications on request. The sign comprises an EM312SR module. It must be connected to the loop and a 24Vdc power source. As well as activating warning signals,

this device provides an input for a conventional alarm button and a relay for the control of an electromagnetic stop. It is a cost-efficient solution for the complete control of a Fire Exit (REI Door).



| Sound output @ 1 m | 92 dB(A) |
|--------------------|---------------------|
| Light output | EN54-23 W 4,6 - 9,1 |
| Flash frequency | 1 Hz |

| Current draw | 50 mA |
|------------------------|---------------------|
| Dimensions (w x h x d) | 293 x 130 x 75 mm |
| Operating temperature | from -10°C to +55°C |

ESS021* - Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling. Comes with 'Fire alarm' written on it, available with different indications on request. The sign comprises an EM312SR module. It must be connected to the loop and a 24Vdc power source. As well as activating

warning signals, this device provides an input for a conventional alarm button and a relay for the control of an electromagnetic stop. It is a cost-efficient solution for the complete control of a Fire Exit (REI Door).



| Sound output @ 1 m | 92 dB(A) |
|--------------------|--------------|
| Operating voltage | 18 – 30 Vdc |
| Consumption | 21mA (media) |

| Dimensions (w x h x d) | 293 x 130 x 55 mm |
|------------------------|---------------------|
| Operating temperature | from -10°C to +55°C |
| | |

ISB1010 - Non-addressable base with audible signalling

ISB1020 - Non-addressable base with audible/visual signalling

ISB1030 - Non-addressable base with audible signalling and voice functions

ISB1050 - Non-addressable base with audible/visual signalling and voice functions

Base for Enea series detectors with audible/visual signaller, activated by the R output of the detector, IP21 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone from the 14 tones available, the adjustment of the volume and also the flasher intensity (only for models with visual alarm components). For

models with the voice alarm function, besides the 14 tones, it is also possible to choose from the 16 voice messages available in 8 different languages. The EDRV2000 also provides the customization of tones and voice messages. The device is powered via the loop but is also equipped with terminals for an optional separate power input.





| Tone | | 14 + 16 voice messages selectable via EDRV2000 | |
|------------------------|------------|--|--|
| Sound output @ 1m | | MAX. 98 dB | |
| | High Power | C-3-10 O-4-10 | |
| Visual range (EN54-23) | Low Power | C-3-9 O-3,5-9 | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 220 g | |
| Dimensions | | 112x112x53 mm | |

^{*} Refer to 'Accessory' section for available text.

 $^{^{\}ast}$ Refer to 'Accessory' section for available text.

ISB1011 – Non-addressable base with audible signalling, low power consumption ISB1021 – Non-addressable base with audible/visual signalling, low power consumption

Base for Enea series detectors with audible/ visual signaller, activated by the R output of the detector, IP21 protection grade.

The DIP SWITCH allows selection of the alarm

tone from the 14 tones available, the adjustment of the volume and the flasher intensity (only for models with visual alarm components). Loop-powered.





| Tone Sound output @ 1m | | 14 selectable via DIP SWITCH | |
|------------------------|------------|---|--|
| | | MAX. 98 dB | |
| Visual range (EN54-23) | High Power | C-3-8 O-3,3-8 | |
| | Low Power | C-3-7 O-3-7 | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 1.4 to 23mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 175 g | |
| Dimensions | | 112x112x53 mm | |

ESB1010 - Addressable base with audible signalling

ESB1020 - Addressable base with audible/visual signalling

ESB1030 - Addressable base with audible signalling and voice functions

ESB1050 – Addressable base with audible/visual signalling and voice functions

Base for Enea series detectors with visual/audible alarm signaller, equipped with own address and capable of changing tone (or voice message, for versions with the voice function) in accordance with the situation, IP21 protection grade. Volume, flash intensity and sound sequences can be selected via the control panel from the 14 tones on-board

the device (and 16 voice messages available in 8 different languages, only for versions with the voice function). For models with the voice alarm function, it is also possible to customize tones/voice messages by means of the EDRV2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.





| Tone | | 14 + 16 voice messages selectable via EDRV2000 | |
|------------------------|------------|--|--|
| Sound output @ 1m | | MAX. 98 dB | |
| Visual range (EN54-23) | High Power | C-3-10 O-4-10 | |
| | Low Power | C-3-9 O-3,5-9 | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 220 g | |
| Dimensions | | 112x112x53 mm | |

ESB1011 – Addressable base with audible signalling, low power consumption ESB1021 – Addressable base with audible/visual signalling, low power consumption

Base for Enea series detectors with visual/audible alarm signallers, equipped with own address and capable of changing tone in accordance with the alarm level, IP21 protection grade.

Volume, flash intensity and sound sequence can be selected via the control panel from the 14 tones available.





| Tone Sound output @ 1m | | 14 selectable via DIP SWITCH | |
|------------------------|------------|---|--|
| | | MAX. 98 dB | |
| Visual range (EN54-23) | High Power | C-3-8 O-3,3-8 | |
| | Low Power | C-3-7 O-3-7 | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 1.4 to 23mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 220 g | |
| Dimensions | | 112x112x53 mm | |



ES1010 – Ceiling mount addressable audible signaller

ES1020 – Ceiling mount addressable visual/audible alarm signaller

ES1030 – Ceiling mount addressable alarm signaller with voice functions

ES1050 – Ceiling mount addressable visual/audible alarm signaller with voice functions

Ceiling mount addressable visual/audible-alarm signaller, IP21 protection grade. Volume, flash intensity and sound sequences can be selected via the control panel from the 14 tones on-board the device (and 16 voice messages available in 8 different languages, only for versions with the

voice function). For models with the voice alarm function, it is also possible to customize tones/ voice messages by means of the EDRV2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.



| Tone Sound output @ 1m | | 14 + 16 voice messages selectable via EDRV2000 MAX. 98 dB | |
|------------------------|---------------|--|--|
| | | | |
| Low Power | C-3-9 O-3,5-9 | | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 175 g | |
| Dimensions | | 112x112x37 mm | |

ES1011 – Ceiling mount addressable audible alarm signaller with low power consumption ES1020 – Ceiling mount addressable audible/visual alarm signaller with low power consumption

Ceiling mount addressable visual/audible-alarm signaller, IP21 protection grade. Volume, flash intensity and tones can be selected via the control panel from the 14 available.

Loop-powered.



| Tone | | 14 selectable via DIP SWITCH | |
|------------------------|------------|---|--|
| Sound output @ 1m | | MAX. 98 dB | |
| Visual range (EN54-23) | High Power | C-3-8 O-3,3-8 | |
| | Low Power | C-3-7 O-3-7 | |
| IP protection rating | | IP21 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 1.4 to 23mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 175 g | |
| Dimensions | | 112x112x37 mm | |
| | | | |

ANALOGUE-ADDRESSABLE DETECTION ENFA





ES2010RE – Wall mount audible alarm signaller. Red

ES2010WE - Wall mount audible alarm signaller. White

ES2020RE - Wall mount visual/audible alarm signaller. Red

ES2020WE - Wall mount visual/audible alarm signaller. White

ES2030RE – Wall mount audible alarm signaller with voice alarm. Red

ES2030WE - Wall mount audible alarm signaller with voice alarm. White

ES2050RE – Wall mount visual/audible alarm signaller with voice alarm. Red

ES2050WE - Wall mount visual/audible alarm signaller with voice alarm. White

Wall mount addressable visual/audible-alarm signaller, IP65 protection grade. Volume, flash intensity and audio sequences selectable via the control panel (and diversified according to circumstances) selectable from the 14 tones (and 16 messages in 8 different languages for the versions

with voice functions) available on board the device. For models with the voice alarm function, it is also possible to customize tones/voice messages by means of the EDRV2000. The device is powered via the loop but is also equipped with terminals for an optional separate power input.





| Tone Sound output @ 1m | | 14 + 16 voice messages selectable via EDRV2000 | |
|------------------------|------------|--|--|
| | | MAX. 101 dB | |
| Visual range (EN54-23) | High Power | W-3.5-10.2 O-3.5-10.5-10.0 | |
| | Low Power | W-2.8-7 O-2.8-7.5-7 | |
| IP protection rating | | IP65 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 150 g | |
| Dimensions | | 121 x 121 x 57 mm | |

ES2011RE – Wall mount audible alarm signaller with low power consumption. Red ES2011WE – Wall mount audible alarm signaller with low power consumption. White ES2021RE – Wall mount visual/audible alarm signaller with low power consumption. Red ES2021WE – Wall mount visual/audible alarm signaller with low power consumption. White

Wall mount addressable visual/audible-alarm signaller, IP65 protection grade.

Volume, flash intensity and tones can be selected via the control panel from the 14 available.

The device is powered via the loop but is equipped with terminals for an optional separate power input.





| Tone Sound output @ 1m | | 14 selectable via DIP SWITCH | |
|------------------------|------------|---|--|
| | | MAX. 101 dB | |
| Visual range (EN54-23) | High Power | W-3.5-7 O-3.5-8-7 | |
| | Low Power | W-3-6.5 O-3-8-6.5 | |
| IP protection rating | | IP65 | |
| Operating voltage | | 18 – 30 Vdc | |
| Consumption | | From 1.4 to 23mA (depending on the selected tone) | |
| Operating temperature | | from -10°C to +55°C | |
| Weight | | 150 g | |
| Dimensions | | 121 x 121 x 57 mm | |

PLEXI_ES2000* – Signalling sign with placement for sounder installation

Transparent plexiglass panel with 'FIRE ALARM' warning (white wording on red background) and Inim Logo. The panel is supplied with assembling kit and template. Dimensions: $430 \times 130 \times 4$ mm.



^{*} Refer to 'Accessory' section for available text.

EITK2000-ToolKit

Kit* for manual addressing, configuration, maintenance and diagnostics of systems made up of IRIS and ENEA series devices



Front view of driver



EITK2000 ToolKit

EITK2000 is a kit consisting of an EDRV2000 driver, the FireGenius-PRO software and a series of accessories for the connection and power supply.

The EDRV2000 driver, thanks to its ergonomic shape, allows you to perform with ease manual addressing operations on addressable-analogue devices from the Enea series, in the event that you do not want to use the automatic addressing function provided by Inim control panels.

The driver is also equipped with an 'ICP' communication port through which it is possible to connect to fire alarm signalers from the Iris and Enea series and configure their operating parameters (select alarm tones/messages, volume, flasher power, etc.). Through the driver and the FireGenius-PRO software, it is also possible to customize the tones/messages of the signalers by choosing from the large library available and composing tones to your liking or by starting from audio files.

The kit also allows you to take full advantage of the unique features offered by the LoopMap and Versa++ technologies integrated in the analogue-addressable detectors of the ENEA series.

By connecting the EDRV2000 driver to the loop and interfacing it with a PC on which the FireGenius-PRO software is running, it is possible, thanks to the LoopMap technology, to reconstruct the loop wiring map.

The various connected devices are identifiable through their unique serial number and type. The FireGenius-PRO software is capable of reconstructing the wiring order along the cable and to recognize and trace any 'T' junctions that are present. The FireGenius-PRO software application presents the wiring in graphic form.

By clicking on the system elements, you will be able to establish the status (smoke level, contamination, etc.) and interact in real-time, for example, by activating LEDs or outputs.



Smoke and temperature graph on display



Loop configuration

ORDER CODES

EITK2000 Kit for the configuration, maintenance and diagnostics of systems based on IRIS and ENEA series devices.

The kit includes EITK-DRV, EITK-BASE, EITK-PWSP.

EDRV2000 Driver for zones with IRIS series devices or loops with ENEA series devices.

EITK-PWSP Power supply for the EITK-DRV driver.

 $^{^{*}}$ The kit includes EDRV2000 and EITK-PWSP.

EN 54-3 EN 54-17

Vega

Analogue addressable detector series



All Vega series detectors are certified in accordance with the applicable EN54 standards and are CE marked in accordance with the European Construction Products Directive (CPD) by BSI.

VEGA V100 - Intelligent photo detector

The signal processing used by this detector efficiently analyzes the conditions within the

VEGA V350 - Intelligent thermal detector

This detector provides an advanced method of detection combined with sophisticated analysis and control panel communication. It uses an accurate thermistor to sense temperature changes

VEGA V200 - Optical heat detector

The sophisticated algorithm implemented inside analyzes both the quantity of smoke detected in the chamber and the changes in

Decor line

V100, V200 and V350 detectors are also

protected environment and ensures high immunity to false alarms.

in the protected environment. This electronic sensing method ensures detection efficiency and high immunity to false alarms. It is programmable by means of the VPU100 field programmer as Rate-of-rise or Fixed high temperature.

the ambient temperature perceived by the thermistor, guaranteeing a rapid and effective response even in the event of the start of a fire characterized by low visible smoke emission.

available with décor line covers for aesthetically demanding environments.















Modules







Minimodule

| Single supervised input | VMI100 | VMMI100 (VdS G212064) |
|---------------------------------|---------|------------------------|
| Single supervised output | VMC100 | VMMC100 (VdS G212066) |
| Input/Supervised Output | VMIC100 | VMMIC100 (VdS G212067) |
| Input/Output Voltage free relay | VMIC120 | VMMIC120 (VdS G212065) |
| Unsupervised output | VMC120 | VMMC120 (VdS G212063) |

ORDER CODES



VMCZ100

This device allows you to interface a line of conventional devices (detectors, call points, etc.) to the loop. Supplied in its own enclosure 130x95x60 with IP65 protection rating.



VMICADA

This device occupies 8 addresses. Supplied in its own enclosure 210x170x65 with IP65 protection rating.

Call points

VCP100 - Addressable resettable call point

VCP100 call points connect directly to the detection loops of addressable analogue control panels.

LPCB Cert. No. 998h



Detector bases

The vast range of bases allows the detectors to adapt to all types of applications. ABS enclosures with heavy duty contacts ensure high performance and reliability through time.

VB100 – Standard base for analogue addressable VEGA series detectors

VDBS100 – Deep base for analogue addressable VEGA series detectors





Visual/Audible signalling devices

CWS100 - Conventional IP65 Sounder

CWS100-AV – Conventional IP65 Sounder and Beacon

ALWS-MOD – Intelligent sounder loop interface module



IL0010 - Alarm Repeater

 $\ensuremath{\mathsf{LED}}$ repeater that replicates the signal generated by a detector in alarm status.



Accessory items

VPU100 - Driver

Configures the addresses of Argus series devices.



EN 54-3 EN 54-17 EN 54-18

XP95 Series Detectors



55000-620

Low-profile analogue optical smoke detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote

output capable of supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.







55000-420

Low-profile analogue heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped

with status signalling LEDs and a remote output capable of supplying 17mA maximum. Incorporated anti-removal device.







55000-401

Low-profile analogue high temperature detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of supplying 17mA maximum. Incorporated anti-removal device.





55000-885

Low-profile analogue optical smoke and heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Certification: EN54/pt7 and pt5 VDS.





38531-771

Spare address card with plastic tag. In the part that protrudes it is possible to indicate the detector number. To be requested in the case of change/loss.

45681-284

Addressable base with built-in isolator in white thermoplastic with bayonet lock for XP95 and Discovery detectors.

Signalling LED indicates isolator activation.

Discovery series detectors



58000-600

Low-profile optical smoke detector with onboard intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of supplying 17mA maximum. Operating voltage 14-28 Vcc (polarity-insensitive). Apollo Discovery protocol. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.







58000-400

Low-profile heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable

base. Equipped with status signalling LEDs and a remote output capable of supplying 17mA maximum. Incorporated anti-removal device.







58000-700

Low-profile optical smoke and heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of

supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.







58000-300

Carbon monoxide detector for the sensing of smouldering fires.

This CO detector responds to certain types of fire only and does not detect the presence of smoke or flames.



58000-305

Carbon monoxide detector for the sensing of smouldering fires (CO detection) and the detection of flames (heat sensing). Ideal for hotel

rooms where steam from bathrooms may cause optical smoke detectors to trigger false alarms.







45681-210

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. Equipped with 4 screw terminals for quick, reliable installation. Base supplied with

address card.



45681-242

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. The on-board relay provides a NC/

NO contact configurable from the control panel. Base supplied with address card.



EN 54-3 EN 54-17

Accessory items

53832-070

Remote indicator provides visual signals relating to the status of detectors located in difficult-

to-inspect places. Suitable for all types of detectors



55000-760

Single input module for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting

and short-circuits on the line. A red LED indicates interface alarm status. Complete with isolator.







55000-845

Interface for analogue control panels capable of managing an absorption line for conventional detectors. The interface comes with

enclosure and terminal board. A red LED indicates interface alarm status. Complete with isolator.







55000-847

Input/output module suitable for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting and short-circuits on the line.

The output line voltage-free contacts (Common; Normally Closed; Normally Open). A red LED indicates interface alarm status. Complete with isolator.







55000-852

Supervised single-output module for sounders and bells. The output is monitored for wire-cutting and short-circuits on the line. The load requires an external supplementary power supply. The interface is equipped with a NO/

NC fault input for control of the supplementary power supply. Polarity-insensitive. Complete with isolator.







55100-908

Analogue manual call point in red thermoplastic enclosure with resettable operating element. Addressable programmed via a DIP switch housed inside the enclosure.

Equipped with special key for reset and test functions. A red LED indicates alarm status. Complete with isolator.





45681-330

Addressable sounder beacon base with isolator. Suitable for connection to the detection loop of a fire-detection panel. ACCEPTS the direct attachment of a detector to the beacon to create a single device with different addresses.

Addressable programmed via a DIP switch housed inside the base. SELECTABLE sound-output volume. White enclosure. Supplementary power supply not required. Complete with isolator.



55000-278

100dB sounder. Suitable for connection to the detection loop of a control panel. Addressable programmed via a DIP switch housed inside the sounder.

SELECTABLE sound-output volume. White enclosure. Supplementary power supply not required.



55000-878

Beacon with high-efficiency LED. Suitable for connection to the detection loop of a fire detection panel. Requires addressable mounting

base. Emits a red intermittent light at onesecond intervals. Supplementary power supply not required.





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

SmartLine

Conventional control panels with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36



The SmartLine conventional fire-detection control panel series offers a 2 zone non-expandable model (SmartLine020-2), a 4 zone model expandable to 20 zones (SmartLine020-4) and a 4 zone model expandable to 36 zones (SmartLine036). The extreme compactness, trouble-free installation, uncomplicated programming procedures and simple end-user operation make this highly competitive control panel ideal for all small and medium applications. The numerous functions (timers, equational logic, etc.), extensive flexibility (automatic output balancing, multifunction inputs, customizable outputs, gas function integration, etc.) and innovative connectivity capabilities (RS485 BUS for power supply stations, Internet connection, etc.), provide the tranquility of knowing for sure that this powerful tool is capable of satisfying every need of every type of installation. SmartLine control panels have supervised outputs (one on the motherboard and one on each added expansion) for the activation of audio-visual signalling devices, a customizable relay output, fault signaling outputs and two 24V outputs (one constant and one interruptible by installer-defined conditions). Additionally, each detection zone provides a terminal which can be configured as: open-collector output (activated by programmable conditions), supervised input, or Gas 4-20mA detector interface.

System information is provided through the graphic display and LEDs on the control panel front plate. The RS485 BUS supports 4 remote repeater panels (SmartLetUSee/LCD-Lite). These repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level. The BUS also supports two powersupply stations which can be connected in such a way as to allow supervision of their functionality and activation/deactivation of their output power during predefined conditions. Programming the system from the front plate is simple and intuitive thanks to the graphic display. However, it is possible to configure the control panel from a PC via an RS232 serial connection, the simple and intuitive SmartLeague configuration software greatly speeds up the commissioning of the system. The SmartLAN/485 board allows the control panel to connect to an Ethernet network for remote access via the Internet. Once the remote connection has been established, it is possible to modify the configuration parameters, upload/download programming data and/or manage the system by means of the supervisory software based on SmartLook graphic maps.

Accessory items

SmartLine/8Z

8 zone expansion board equipped with an additional supervised output.

SmartLetUSee/LCD-Lite

Remote repeater panel equipped with display and user-interface keypad (up to 4 for each control panel).

SmartLAN/485

Ethernet connection board. Allows the control panel to connect to an Ethernet network for remote for programming and monitoring via the Internet using SmartLook graphic maps. The board implements the SIA-IP communication protocol.

SmartLetLoose/ONE

Fire extinction board for the management of a gas extinguishing channel. Approved CPD - EN12094-1.

SmartLine/LOGEXP

Log event capacity expansion board for the storage of the last 2,000 events that occurred in the system. SmartLine/LOGEXP provides a non-volatile memory of the events log that retains stored data even when the control panel is turned off.

SmartLevel

Power-supply station connectable to the RS485 BUS (for supervision and management of the control panel power-supply-station outputs) – Refer to 'Power-supply stations' section.













Main features

- Conventional fire-detection control panel
- Available with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36
- Certified EN54-2 / EN54-4
- Certified EN12094-1 (Fire extinction)
- Supports up to 32 devices per zone
- Manages SmartLetLoose/One Fire Extinction board (Function EN12094-1 Approved)
- 1 supervised alarm output (NAC)
- 1 output for communicator/dialler activation
- 1 dry-contact alarm output
- 1 dry-contact fault signalling output
- 1 power supply output for ancillary devices
- 1 interruptible power supply output for ancillary devices
- 1 additional terminal per zone configurable as: open-collector output, supervised input, Gas detector input with 4-20mA interface
- Battery shutdown relay for deep discharge conditions
- Backlit graphic display for easy management of Installer/User interface
- Navigation keys for easy access to graphic display functions
- Fast keys (Silence, Reset, Evacuate, Investigate)
- RS485 BUS for the connection of Repeater panels and Power supply stations (SmartLevel)

- Signalling buzzer
- 8 Timers
- 8 logical equations
- Automatic balancing of individual detector lines
- RS232 connector for programming via PC
- Programming software
- Easy system programming from the control panel
- Access key for level 2 functions (EN54 compliant)
- Battery charge optimization (via thermal probe)
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac
- Switching power supply/battery charger 1.4A @ 27.6Vdc (for SmartLine020) or 4A @ 27.6Vdc (for SmartLine036-4)
- Battery housing for two 7Ah 12V batteries (for SmartLine020) or two 17Ah – 12V batteries (for SmartLine036-4)
- Dimensions: (HxWxD for SmartLine020): 325x325x80mm (HxWxD for SmartLine036-4): 497x380x87 mm.
- Weight (without batteries) SmartLine020: 3 Kg SmartLine036-4: 6 Kg

CONVENTIONAL DETECTION SMARTLINE CONTROL PANELS



EN 54-2 EN 54-4 N 54-21 N 54-13

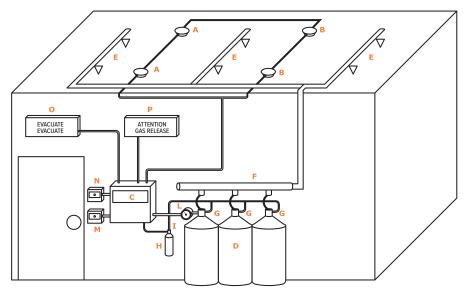
Extinguishment

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLine series fire control panel provides the system with GAS extinction control capabilities in compliance with EN12094-1. The control panel provides all the functions required by law and allows the connection of the various accessories necessary for the management of a fire extinction system (refer to 'Accessory

items for fire extinction systems'). SmartLine fire extinction control panels can operate autonomously or can interface with addressable analogue control panels from the SmartLoop series by simply connecting them to the RS485 BUS of the latter (extinction stations for addressable systems).

DIAGRAM KEY

- A Line 1 detectors
- B Line 2 detectors
- C SmartLine fire extinction control panel
- D Extinguishing gas cylinders.
- E Gas release nozzles
- F Gas collectors
- G Pneumatic release valve
- H Pilot cylinder for gas release
- l Pilot cylinder electrovalve
- L Pressure switch
- M Manual activation button
- N Stop extinction button
- Audio/Visual signaller of imminent gas release
- P Audio/Visual signaller of gas present



Application diagram

Main features

- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Indicator LEDs (status, disabled, faults)
- Supervised terminals for manual fire extinction commands
- Supervised terminals for STOP fire extinction commands
- Supervised terminals for pressure switch control
- Supervised output for activation of fire suppression devices
- Supervised output for activation of pre-extinction signallers
- Supervised output for activation of extinction-in-progress signallers

ORDER CODES

SmartLine020-2 Non-expandable 2 zone conventional control panel.

SmartLine020-4 Conventional control panel with 4 zones expandable to 20.

SmartLine036-4 Conventional control panel with 4 zones expandable to 36.

SmartLine/8Z 8 zone expansion board SmartLAN/485 Ethernet connection board

SmartLetLoose/ONE Extinction board

 $\textbf{SmartLetUSee/LCD-Lite} \qquad \text{Remote-control repeater panel for SmartLine and SmartLight control panels}.$

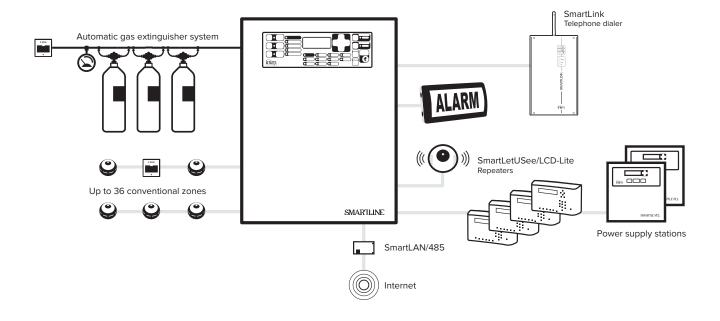
SmartLeague Programming and management software.

Link232F9F9 RS232 connection cable between PC and Inim devices.

IPS24060GPower supply module 1.5A @ 27.6Vdc.IPS24160GPower supply module 4A @ 27.6Vdc.

ProbeTH Thermal probe - protects the battery against overheating and consequent permanent damage.

Application diagram



SmartLeague programming software



The completely-overhauled SmartLeague management and programming software is an indispensable tool for all those professionals who require full control of fire detection systems. In addition to allowing fast configuration of the control panel



parameters, it offers an overview of the system and provides wiring diagrams of the various terminals in function of the set options.

CONVENTIONAL DETECTION IRIS

Iris

Conventional detectors





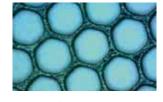
IRIS series detectors maintain the ease-of-use of conventional detectors, yet are capable of providing a series of technical solutions that until today were provided by only the most sophisticated addressable analogue systems. As a result of advanced technologies based on new-generation microprocessors, these detectors implement a set of sophisticated algorithms capable of ensuring unequaled reliability and a high immunity to false alarms. The ground-breaking Versa++ technology incorporated in IRIS series detectors allows you to configure individual detectors to suit their specific environments and, when used in conjunction with the EITK1000

kit, to connect directly to the detector line for a complete diagnosis of each detector and thus test its operating capacity, verify its real-time values, view the contamination level in the optical smoke chamber and change its sensitivity and operating mode. Each detector has a non-volatile memory which allows you to view the smoke and temperature levels measured in the period prior to the last alarm detected. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service. And, therefore, hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

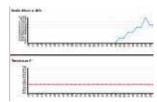
Main features

- Newly designed optical chamber with sealed upper-part and 500 μm holes diameter mesh insect screen
- Bicolour LED: Red for alarm; green flash (optional) for stand-by and fast flash for trouble (fault or high level of contamination in the optical smoke chamber)
- Drift compensation for sensor drift caused by dust in the chamber
- Settable smoke and heat detection sensitivity (by means of EDRV1000 driver)
- Operating mode selection (by means of EDRV1000 driver for ID300 version): only smoke; only heat; AND mode; OR mode; PLUS mode

- Complete diagnostics: view the contamination level in the optical chamber and verify realtime values (by means of EDRV1000 driver)
- Memory of the smoke and temperature readings measured in the five-minute period prior to the last alarm detected
- Vast range of options (selected by means of EDRV1000 driver)
- Bypass plate on base guarantees continuity in the event of removal of the detector from the line



Insect screen



Smoke and temperature graph



| Parameter | ID100 | ID200 | ID300 |
|-----------------------------|--------------------------------|---|---|
| Operating voltage | 10-30 Vdc | | |
| Standby current consumption | 90 uA | 70 uA | 90 uA |
| Alarm current consumption | Max 40 mA | | |
| Sensitivity | 0.08 - 0.10 - 0.12 - 0.15 dB/m | A1R (58°C + RoR) – B (72°C) – BR (72°C + RoR) – A2S (58°C) | 0.08 - 0.10 - 0.12 - 0.15 dB/m A1R (58°C + RoR) - B (72°C) - BR (72°C + RoR) - A2S (58°C) AND - OR - PLUS Mode |
| Operating temperature | -5°C + 40°C | | |
| Height (base included) | 46 mm 54 mm | | 54 mm |
| Diameter | 110 mm | | |
| Weight (with base) | 160 g | | |
| Weight (without base) | 90 g | | |

ID100 – Optical smoke detector

The ID100 optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed upper-part and 500 μ m holes diameter mesh

insect screen ensure high immunity to false alarms. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m – 0.10 dB/m – 0.12 dB/m - 0.15dB/m).







ID200 - Heat detector

The detector is supplied in A1R mode (fixed threshold at 58°C and rate of rise detection), however it can be set (via the EDRV1000 driver) in mode: B (Fixed threshold at 72°C), A2S (Fixed threshold at 58°C), BR (Fixed threshold at 72°C

with rate of rise detection). As a result of its high flexibility, this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.







ID300 – Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving

inflammable liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on site (by means of the EDRV100 driver) by selecting from the following:







EN 54-7 EN 54-5

- PLUS Mode (set at factory): the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat threshold (configurable as per the ID200). Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to the maximum value. This operating mode, characterized by high sensitivity, allows detection of fast burning blazing fires (for example, fires involving inflammable liquids such as alcohol).
- OR Mode: the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat threshold (configurable as per the ID200). This operating mode, characterized by discrete sensitivity analysis, allows

Black plastic and wood-look enclosures available on request for quantities.

- the detector to sense fires with a high emission of smoke and low heat output (for example, smouldering fires) and also fires with low emission of smoke and high heat output (for example, burning chemicals).
- AND mode: the detector will trigger an alarm only when the set smoke and heat thresholds (configurable as per the ID100 and ID200) are exceeded at the same time. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- SMOKE Mode: the detector will operate as per the ID100.
- **HEAT Mode:** the detector will operate as per the ID200.



EB0010 - Detector mounting base

Detector base for IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.



EB0020 - Relay base

The base is equipped with a relay activated by the detector.



EB0030 - Deep base

Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under the detector base, h 34mm.



EB0040

Base protected against dripping water when tilted up to 15 degrees max.



EB0050

EB0010 base spacer, to be installed under the base to create a 10 mm gap for the entry of exposed cables.



EB0060

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

Manual call points

IC0020 - Manual call point

- Manual call point with resettable element operated by plastic key (included)
- Activation condition indicated by coloured band and LED
- Selectable alarm resistor

WCP0020 optional accessories (transparent screen for IC0020 buttons protects against accidental activation) and FCP0020 (flange for flush mounting the IC0020 button; fits UK Single Gang boxes). DBCP0020 – Deep box for external pipe fitting (base h = 33mm; base + call point h = 57mm).





IC0011E - Outdoor manual call point (IP67)

Manual call point with resettable element. Waterproof to IP67, suitable for outdoor installation.



Remote indicators

IL0010 – Remote indicator

Remote fire-warning indicator



EITK2000-ToolKit

Kit* for manual addressing, configuration, maintenance and diagnostics of systems made up of IRIS and ENEA series devices



The EIKT2000 kit also takes advantage the Versa++ technology, thanks to which it is possible to manage IRIS series conventional fire detectors and configure each one in accordance with the specific conditions of the environment in which it is to be installed. With EITK2000 it is possible to connect to a line of detectors and, for each of them, carry out a complete diagnosis to test its functionality, verify the value read in real time, read the contamination value of the optical chamber, change its sensitivity and operating mode. The kit also allows you to read the nonvolatile memory, present in every detector (both Iris and Enea

series), which contains a graph with the smoke and temperature concentrations measured in the period before the last alarm detected (a function aimed at assisting investigation into the causes that triggered the alarm).

The device also allows the implementation of accurate diagnoses that identify where the cable is interrupted or shorted, and the carrying out of tests on the loop (walk tests) which monitor the number of communication errors, record the date and time of activation of each detector and, on completion of the operations, provide a printable professional report.



Smoke and temperature graph on display



ToolKit

ORDER CODES

EITK2000 Kit for the configuration, maintenance and diagnostics of systems based on IRIS and ENEA series devices.

The kit includes EITK-DRV, EITK-BASE, EITK-PWSP.

EDRV2000 Driver for zones with IRIS series devices or loops with ENEA series devices.

EITK-PWSP Power supply for the EITK-DRV driver.

^{*}The kit includes EDRV2000 and EITK-PWSP.



F-COM

Universal telephone communicator for fire detection systems

F-COM

As required by the reference legislation, all unmanned fire detection and alarm systems (IRAI) must be equipped with a remote communicator CERTIFIED EN54-21. The F-COM universal communicator, thanks to its flexibility and configuration simplicity, is

The F-COM universal communicator, thanks to its flexibility and configuration simplicity, is capable of sending voice calls in response to the activation of its input lines (it includes a memory for voice messages configurable via audio recorder or text-to-speech converter), as well as digital calls via the most widely used communication protocols and SMS texts.

Thanks to the graphic display and the intuitive user interface, the F-COM communicator is simple to use, effective and adapts to any control panel of any brand and model. F-COM is capable of remotely transmitting any type of alarm condition, fault and is freely configurable via hardwired Telephone line, GSM Line or 3G data line.

The communicator has its own internal EN54-4 certified power supply, houses two 12V 1.2Ah batteries (not supplied).



Main features

- Universal communicator
- Certified EN54-21 and EN54-4
- Certified IMQ
- Hardwired telephone line, GSM line, 3G data line
- Voice and digital calls, SMS texting
- Fire Alarm call activation input
- Fault call activation input
- Received call confirmation output
- Fault signalling output
- N° 1 configurable output terminal
- 3 configurable input/output channels
- All input/output terminals fully configurable (polarity, balancing, programmable thresholds)

- Activation of calls in response to internal conditions (20 different configurable conditions)
- Phonebook with 32 contact spaces
- 32 configurable SMS messages
- 100 configurable voice messages (audio files, recorder, text-to-speech)
- Internal events memory
- Graphic LCD screen
- EN54-4 certified internal power supply
- Fully configurable from the front panel or via the F-COM Studio configuration software

F-COM Studio

The 'F-COM/STUDIO' PC software can be obtained free of charge from the Inim Electronics website. This software will allow you to configure quickly and with ease all the parameters of the new communicator as well as manage a database containing all the configurations of your customers.





ORDER CODES

Libra

Argus wireless solutions

The Libra wireless system offers an excellent solution for all those fire detection applications which would find a traditional hard-wired system installation to be either unfavourable or costinefficient, places such as: hotels, museums, churches or similar cultural sites. The Libra is the ideal way of enhancing a traditional hard-wired analogue addressable fire detection system with wireless devices. This is made possible by the protocol translator that connects to and feeds directly from the loop and allows the control

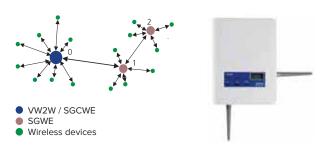
panel to communicate with up to 32 wireless devices. The applied wireless technology uses up-to-the-minute electronic components and a protocol resulting from intense research and development to guarantee maximum reliability, response speed and an optimized battery life on devices. The range of wireless devices available includes Optical smoke detectors, Temperature detectors, Multicriteria detectors, Call points, Input modules and Sounders.



Features

- On site programming
- Two-way communication with the wire to wireless translator
- Programmable sensitivity
- High reliability and sensitivity
- Flexible device installation on site SW supported
- Cost effective: simplified installation and increased duration in the absence of maintenance.
- Double battery (main and secondary) guarantees a correct supply for about 5 years; the battery status is monitored by the device

Translator



| General technical characteristics | | |
|-----------------------------------|-------------|--|
| Operational frequency | 868 Mhz | |
| Radiated power | 0.01 - 5mW | |
| Modulation type | GFSK | |
| Frequency channel | 7 | |
| Primary battery | CR123A | |
| Secondary battery | CR2032A | |
| Temperature | -30°C +70°C | |
| | · | |

VW2W100 - Translator

Loop-powered wireless translation device. Processes signals from detectors, modules, call points and all wireless devices, then relays the information regarding the devices and its own status to the control panel.

SGCWE100 - Wireless translator

Stand-alone device equipped with two contacts: fault and alarm. Interfaces the Libra system to conventional control panels or any other type of system.

SGWE100 - Wireless range expander

Expands the range of the translator. Creates a microcell structure which can be configured in series in order to greatly boost the wireless range. Up to 6 Wireless range expanders can be added.

Detectors

L-OP-SG – Wireless Optical Smoke Detector
L-MC-SG – Wireless Optical Smoke/Heat Detector
L-HT-SG – Wireless Temperature Detector
SGRBS100/L – Wireless Base Sounder
SGRBS100-AV/L – Wireless Base Sounder and Beacon

Ancillaries

SGCP100 – Wireless call point
SGMI200 – Wireless input module
SGMCB200 – Wireless Output Module - 2 outputs
CWS100 – Conventional IP65 Sounder
CWS100-AV – Conventional IP65 Sounder and Beacon
SGWS-MOD – Wireless sounder interface module
SGFI100 – Wireless Alarm Repeater - Addressable



Linear smoke detectors

Linear smoke detectors are a very common solution in large applications (industrial buildings, large warehouses, hangars, etc.). In fact, they are a very effective method of detection on account of reflective technology which greatly reduces wiring needs. However,

this approach to detection can be unreliable and difficult to maintain. Inim has managed to solve the problems of 'classical' beam detection, by using an innovative self-aligning motorized beam head and an easy-to-operate controller.









Control



Mounting plate



Prism reflector



Swivel mounting bracket



Anti-condensation kit

Linear smoke detector: reflective optical beam smoke detector with a motorized head, capable of aligning itself automatically during the commissioning phase and of re-aligning itself during service. These operations can be controlled from ground level by means of the controller unit. The system includes a motorized head containing an infrared transceiver, a ground level controller and reflectors. Eventual smoke contamination is revealed by the returned infrared beam analysis. This detection method allows the system to detect fire in its early stages. Adjustments can be made from ground level by means of the controller unit. The standard system covers a range of 5 to 70 meters, however, a range-expander kit is available: a 70 to 140 meters kit which uses 4 reflectors

Commission: the beam alignment phase is an extremely simple procedure. This is due to the fact that the beam aligns itself on the centre of the reflector.

Adjust thresholds: the beam detector sensitivity is fully adjustable between 25 and 50% of beam obscuration.

Check contamination compensation: the beam detector automatically compensates for dust build up on the lenses. The

contamination level of the lenses can be viewed on the LCD screen. The lenses should be cleaned when necessary. Alarm and fault delay: the alarm delay can be set at 1 and 30 seconds (in steps of 1 second), whereas the Fault delay can be set at 1 to 60 seconds.

Change latching mode: the beam detector relays can be set to latch on alarm or auto reset depending on application requirements.

Turn on and off: the beam detector can be switched off from the control panel. Should you forget to turn it back on, it will resume normal operation after 8 hours.

Self test: the beam detector can be tested from ground level as part of routine maintenance.

IP65: the enclosure is IP65 rated. The device is fully sealed, therefore, is suitable for installation in unfriendly (dusty or dirty) environments and can even be pressure washed.

Anti-condensation kit: kit consists of a lens that you attach to the beam and a reflector that feature a special coating that prevents condensation from forming.

| Enclosure | White high heat abs UL94 HB | |
|-----------------------|--------------------------------------|--|
| Protection rating | IP65 | |
| Operating temperature | -15°C/+55°C | |
| Time to fault | Adjustable between 1 and 60s | |
| Time to fire | Adjustable between 1 and 30s | |
| Sensitivity | Fully adjustable between 25% and 50% | |
| Operating voltage | 10.2 / 30 V | |

| 3 mA | |
|-------------------------------------|--|
| 3 mA | |
| Optional | |
| 1A @ 30 V | |
| 1A @ 30 V | |
| 155x180x125 mm | |
| Detector: 1 Kg - Controller: 0.5 Kg | |
| | |

ORDER CODES

BDH110 5m-70m reflective optical beam detector. Includes: a detection unit, a control unit, a reflector unit.

BDHADAPT Mounting plate for beam head or single reflector.

70KIT 140 Range extension kit up to 140m. 140KIT 160 Range extension kit up to 160m. FB-BRACKET Swivel plate for prism reflector.

FOGKIT Anti-fogging kit for BDH100 linear detector.

FOGREF Reflector for the FOGKIT anti-fogging kit for the BDH100 linear detector.

Adapters for duct applications

Housing for duct sampling smoke detector

In places where air ducts are present, their proper monitoring is necessary for an installation that meets requirements. International standards and codes acknowledge that air conduction systems can transfer smoke, toxic gases or flames from one area to another thus multiplying the risk of accidents, panic and damage to property. One of the main aims of duct-

smoke detection is to minimize the propagation of smoke through recirculation, to achieve this an efficient detection system is essential that allows an immediate reaction by blocking fans and closing shutters. INIM offers everything necessary for this type of need.







DDHBRKTN

DDHCoverN

EBDDHN - Universal adapter for duct installation

Houses all types of detector (analogue or conventional). The detector base (not included) fits inside and is secured firmly in place by means of two screws (included). A practical terminal board makes wiring easy. It provides early warning of smoke by continually sampling air movement within heating and ventilation ducts in industrial and commercial buildings. Based on the Venturi principle, this device has been designed to operate with an optical smoke detector and adequate length air-sampling tube. It operates at an air velocity of between 0.5m/s to 20m/s.

τv

Air-sampling tube: the air-sampling pipe is available in three different lengths: 0.6m, 1.5m, 2.8m. It should be chosen in accordance with the width of the duct concerned. The sampling tube must traverse at least 90% of the duct. If the duct is wider

than 60cm, the sampling tube must traverse the entire duct. **Installation:** the aluminium sampling tube can be easily shortened to adapt to the duct. The diameter of the hole for the air-sampling tube is 38mm.

Air-flow monitoring: the adapter is fitted with a red plastic tongue which indicates the air flow to the detector and thus provides confirmation that there is no leakage and that the air flow from the duct is passing through the housing.

DDHBRKTN – Mounting bracket for circular ducts

This device fits to circular ducts and provides a flat mounting surface for the EBDDHN.

DDHCOVERN – Waterproof cover

This cover is required when the EBDDHN unit is installed outdoors.

- Single tube air-sampling system
- New design sampling tube
- Test hole on cover on
- Easy installation
- Air flow indicator
- Filter to reduce dust and other deposits on the detector
- Efficient service and easy maintenance
- Easy mount sampling tube
- Compatible with analogue and conventional systems
- Mounting brackets for circular ducts

| 180x183x235 mm |
|----------------|
| 700 g |
| 0.6-1.5-2.8 m |
| 0.5/20 ms |
| |

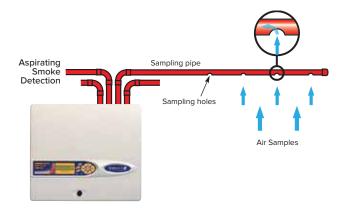
ORDER CODES

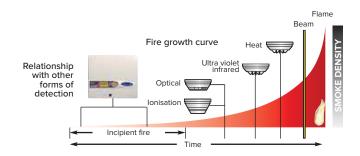
EBDDHN Universal tube adapter.
TV06N 0.6m sampling tube.
TV15N 1.5m sampling tube.
TV28N 2.8m sampling tube.

DDHBRKTN Mounting bracket for circular ducts.

DDHCOVERN Weathertight cover.
DDH204 Set of spare gaskets on.
DDH F1/10 N Anti-dust filter.

Smoke aspirating system





Stratos aspirating systems are capable of controlling sections of sampling pipe with sections varying from 50 meters to 100 mt. depending on the model and the required level of sensitivity. Stratos aspirating systems provide the very earliest warning of smoke. The apparatus comprises a sampling chamber (protected by a disposable filter) and a 3D laser sensor. This particularity, besides guaranteeing effective and timely detection, discriminates effectively between dust particles and aerosols generated by combustion. These features allow very high sensitivity suitable for the protection of particularly delicate sites without incurring false alarms. One of the most important features of the system is its capacity to self-calibrate, this feature determines the maximum sensitivity and reliability for the protected environment. Stratos is equipped with a connector for RS485 line management for networked system purposes, or for data communications to remote sites. Useful relay outputs (Aux, Pre-alarm, fire 1, fire 2) allow Stratos to operate with both conventional and analogue fire-detection systems. Stratos offers a comprehensive range of models with various features such as sampling pipes with several inlets, keypad and display and remote status indicator. These aspirating systems have been designed to operate with traditional fire-detection systems. Therefore, they integrate easily in systems where multipoint and

linear detectors are scarce. There are environments in which the aspirating system allows a more rapid detection (ced-electrical cabinets-etc.). In order to meet these needs, STRATOS has a series of devices designed to facilitate site safety. As a result of the low-maintenance requirements of Stratos systems, they find their niche in environments where maintenance and inspection are often difficult or costly, such as in false ceilings and or floating floors. The installation of Stratos systems in particularly dusty environments is extremely advantageous, in fact, thanks to the interchangeable 'filter cartridges' the detection system is always effective and well maintained and the cost of labour greatly reduced. With Stratos devices it is possible to create systems with different sensitivity and intervention thresholds simply by making more or fewer sampling holes in the same portion of the sampling pipe. Such high-sensitivity coupled with advanced processing allow Stratos to be employed even in the most demanding applications. It is supplied complete with 'PipeCAD' software which allows the design and testing of the aspiration system.

Stratos Micra 10

The highly reliable Micra 10 is a compact, installation-friendly aspiration system capable of detecting smoke at the incipient stage of fire. The 'Classifire' algorithm implemented inside is capable of automatically optimizing the sensitiv-

ity of the detector to suit the environment where it is installed, thus eliminating the need for complex calibration operations. Thanks to its output relays (dry contacts) this device is compatible with all fire detection system.



Features

- Power supply voltage: 21.6V 26.4Vdc
- Consumption: 250mA @ 24Vdc
- Dimensions: 145W x 220H x 90D
- Weight: 1.7 Kg
- Operating temperature: -10 to + 60°C (EN54 Part 20)
- Humidity: 0 90% non-condensing
- Sensitivity: 0.03% to 25% obs/m
- Detection technology: Laser
- Detected particles: 0.0003µm to 10µm

- Dust discrimination system: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length: 50 mt
- Sampling pipe diameter: 3/4" (27 mm)
- Maximum number of sampling holes: 10
- Detection levels: Alarm, Early warning
- On-board relays: Early warning, Alarm, Fault
- Protection rating: IP50.
- Pipe inlet: 1.
- Exhaust pipe to expel the sampled air: 1.

Stratos Micra 25

Micra 25 maintains all the distinctive features of Stratos (ClassiFire® Perceptive Artificial Intelligence Dual Technology LDD 3D3). Micra 25 is the most cost-efficient way of creating a laser-based aspirating system. In fact, it is capable of drawing air from the protected area through a sampling pipe of up to 50m long.

Micra 25 is suitable for installation in small applications or rooms which require individual incipient fire reporting. This device is equipped with an RS485 which allows the connection of several devices in a network. Supplied complete with PIPECAD software.





Features

- Power supply voltage: 21.6V 26.4Vdc
- Consumption: 250mA @ 24Vdc
- Dimensions: 140W x 200H x 85D
- Weight: 1.7 Kg
- Operating temperature: -10 to +38°C (UL268) / -10 to + 60°C (CEA4022)
- Operating humidity range: 0 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015% obscuration per meter
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003μ to 10μ

- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length in a high-airflow environment: 25mt
- Maximum sampling pipe length in a static-air environment: $50\ \mathrm{mt}$
- Sampling pipe diameter: 3/4" (27 mm O/D)
- Sampling holes: 10
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- RS485 Network data bus
- Maximum BUS length: 1.2 Km
- Protection rating: IP50.

Stratos Micra 100

Micra 100 is suitable for small to medium applications. It is capable of drawing air from the protected area through two sampling pipes for a

total length of 100mt. Supplied complete with PIPECAD software.





Features

- Power supply voltage: 21.6V 26.4Vdc
- Consumption: 400mA @ 24Vdc
- Dimensions: 300W x 220H x 85D
- Weight: 3.8kg
- Operating temperature: -10 to +38°C (UL268) / -10 to + 60°C (CEA4022)
- Operating humidity range: 0 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015% obscuration per meter
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003 µ to 10 µ

- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length in a high-airflow environment: 50 mt
- Maximum sampling pipe length in a static-air environment: 100 mt
- Sampling pipe diameter: 3/4" (27 mm O/D)
- Sampling holes: 25 x pipe
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- Network data bus: RS485.
- Maximum BUS length: 1.2 Km
- Protection rating: IP50.

SPECIAL DETECTION SMOKE ASPIRATING SYSTEMS

Stratos HSSD2

Stratos HSSD is capable of drawing air from the protected area through four sampling pipes of up to 100mt each, for a maximum total length of 200mt.

It is equipped with keypad and display and provides information regarding system operating status and eventual alarm conditions. Supplied complete with PIPECAD software.





Features

- Power supply voltage: 21.6V 26.4Vdc
- Consumption: 450mA @ 24Vdc (aspiration velocity=8).
- Dimensions: 427W x 372H x 95D
- Weight: 5.2 Kg
- Operating temperature: -10 to +38°C (UL268) / -10 to +60°C (CEA4022)
- Operating humidity range: 0 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015% obscuration per meter
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003μ to 10μ
- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD)

- Maximum sampling pipe length: 100mt
- Maximum total pipe length: 200mt @ 80 holes 200 mt @ 100 holes
- Sampling pipe diameter: 3/4" (27 mm O/D)
- Sampling holes: 25 x pipe
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- Network data bus: RS485.
- Maximum BUS length: 1.2 Km
- Protection rating: IP50.

ORDER CODES

IN30725 Aspirating system Micra 10.
IN30621 Aspirating system HSSD 2.
IN30671 Aspirating system Micra 25.
IN30672 Aspirating system Micra 100.
IN30436 Relay board for Stratos Micra.
IN30755 Dust filter for Stratos HSSD2.

Sampling pipes

CM 10900 - Sampling pipe (3/4") Red - 3 metres

CM 10908 - Coupling sleeve Red

CM 10906 - 90° Curve Red

CM $10905 - 45^{\circ}$ Curve Red

CM 10927 – Tube end cap Red

CM 10909 – 'T' Junction Red

CM 10925 - Sample point (flexible tube with sample point)

CM 10954 - Pipe Support (replace CM10930)

CM 10960 – Labels for holes location (100 pcs)





Flame detectors





| Technical features | |
|--------------------|--------------------------|
| Supply voltage | 14-30 Vdc |
| Consumption | MAX 30 mA |
| Protection rating | IP65 |
| Sensitivity | 1 according to EN54-10 |
| Output signals | Alarm relay, Fault relay |

IR² Flame detector

Dual-infrared flame detector, designed to protect areas where open fires may be expected.

016581 – IR² Flame Detector

016571 - IR² Flame Detector Intrinsically Safe

016511 – IR² Flame Detector in explosion-proof enclosure

IR³ Flame detector

Triple-infrared flame detector, designed to protect areas where open fires may be expected. Suitable for outdoor area protection.

016589 - IR³ Flame Detector

016579 - IR³ Flame Detector Intrinsically Safe

016519 – IR³ Flame Detector in explosion-proof enclosure

UV/IR² Flame detector

Ultra Violet, dual infrared flame detector, designed to protect areas where open fires are to be expected. Suitable for outdoor area protection. Hi false alarm rejection.

016591 - UV/IR² Flame Detector

016521 – UV/IR² Flame Detector in explosion-proof enclosure

Mounting Brackets

007127 – Swivel mounting bracket

012545 - Steel cover for flame detectors

007279 - Steel cover for flame detectors in explosion-proof casing









Thermosensitive cables



On account of their reliability, performance, ease-of-use and reduced-cost, linear heat detectors are appropriate for all types of installations with a provision for detection by way of temperature control. Linear heat detectors are also suitable for installation in explosive atmospheres (classified areas), when equipped with devices capable of limiting the supply voltage (for example, intrinsic linear barrier).

The use of linear heat detectors is provided for in the reference legislation. Thermosensitive cables fall into 4 categories determined by the external sleeve. Each of the four categories is further divided into sub-categories determined by the alarm temperature.

EPC type cable with durable vinyl outer racket. Good resistance to common chemicals.

| Model | Alarm Temperature | Installation Temperature | Certification |
|--------|-------------------|--------------------------|---------------|
| EPC155 | 68°C | -40 ÷ +38° C | UL, FM |
| EPC190 | 88°C | -40 ÷ +66°C | UL, FM |
| EPC220 | 105°C | -40 ÷ +79°C | UL, FM |
| EPC280 | 138°C | -40 ÷ +93°C | UL, FM |
| EPC356 | 180°C | -40 ÷ +105°C | UL, FM |

XLT type cable with proprietary flame retardant polymer outer jacket. Intended for use in cold storage facilities and applications that require a low alarm activation temperature such as railway and motorway tunnels.

| Model | Alarm Temperature | Temperature Installation Temperature | |
|--------|-------------------|--------------------------------------|--------|
| XLT135 | 57°C | -57 ÷ +38°C | UL, FM |

XCR type cable with external Fluoropolymer coating. Good resistance to common chemicals, acids, solvents and abrasion.

| Model | Alarm Temperature | Installation Temperature | Certification |
|--------|-------------------|--------------------------|---------------|
| XCR155 | 68°C | -40 ÷ +38°C | UL, FM |
| XCR190 | 88°C | -40 ÷ +66°C | UL, FM |
| XCR220 | 105°C | -40 ÷ +79°C | UL, FM |
| XCR280 | 138°C | -40 ÷ +93°C | UL, FM |
| XCR356 | 180°C | -40 ÷ +121°C | UL, FM |



Industrial series gas detectors

ING7 / INE7

The detectors from the INDUSTRIAL series are manufactured using the most modern reflow and SMT construction techniques. They use the latest generation of microprocessor technology to deliver fast response and ensure accuracy and reliability. The sensitive element is connected to an interchangeable device component which allows installers to replace the sensor cap (the part susceptible to wear and tear) without needing to recalibrate the device.

The complete product line includes a wide array gas leak detectors, all available in explosion-proof or dust-proof enclosures to satisfy even the most exacting requirements. During the installation phase or maintenance sessions, you can interface INDUSTRIAL series detectors with a PC or Android Smartphone (via an INA55-701 interface) in order to configure the parameters, change the intervention thresholds, check the gas-level readings and/or simulate alarm, pre-alarm and fault conditions.

Detector specifications

- Thresholds configurable in L.I.E. or P.P.M percentage (%) or percentage of the volume (for oxygen detector only) depending on the gas to be detected.
- Selectable delays from 0 to 240 seconds for each individual threshold.
- Reading compensation system in accordance with ambient temperature.
- Replacement of sensor cap directly on-site without need of titrated gas canisters.
- Connection to PC or Android SmartPhone (via INA55-700 interface) for threshold, filter and delay settings; real-time value readings, and simulation of alarm, pre-alarm and fault conditions.

ING7 - Detector in IP55 enclosure

Detector housed in an IP55 protection rated dust-proof metal enclosure. The sensitive element is located on the underside of the enclosure and is protected by a stainless steel mesh. The sensor cap can be easily and costefficiently replaced at the end of its functional life (3 years in favourable environments with no polluting agents) without any need of dismantling the detector.



INE7 – Detector in explosion-proof enclosure

Il 2G Ex d IIC T6 ATEX certified detector in explosion-proof enclosure; the electronic circuitry housing is made from diecast aluminium suitable for installation in classified areas. The sensitive element is housed in an AISI 303 stainless steel, chromed brass enclosure, coated with approved resin and is located on the underside of the aluminium enclosure. The

sensitive element is protected by a synthesized steel powder disc. The sensor cap can be easily and cost-efficiently replaced at the end of its functional life (3 years in favourable environments with no polluting agents) without any need of dismantling the detector.



INETT – Detector in explosion-proof housing with LCD touch screen

Detector in explosion-proof enclosure like the INE7 series detectors with the addition of an LCD display touch screen, thanks to which calibration, verification and maintenance operations can be performed without opening the enclosure. Thanks to this feature, it is also possible to operate in environments classified as safe.



Orders for Detectors must specify not only the type of enclosure, but also the type of gas, the technology of the sensitive element

| IN Suffix | IN |
|---|----|
| G = IP55 enclosure / E = ATEX enclosure | h |
| Industrial Series (7) | 7 |
| Type of gas (see table 1) | nn |

and the type of output interface. Following is a schematic representation of the order codes.

| Detector technology (see table 2) | t |
|-----------------------------------|----|
| LCD display touch screen | Т |
| Hyphen | - |
| Type of interface (see table 3) | ii |

GAS DETECTION INDUSTRIAL SERIES



| Code nn | Gas detected | Pre-set Pre-alarm/Alarm thresholds | Range |
|---------|---------------------------------------|---|--------------------------------|
| 00 | Methane (CH4) | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 01C/01P | hazard gases (see Order Code Table) | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 01H | Nitrogen dioxide (NO2) | 5 / 10 ppm | 0 - 20 ppm |
| O1IR | Carbon dioxide (CO2) / Butane (C4H10) | 1000 / 2000 ppm, 4000 / 8000 ppm 10000 / 20000 ppm | 0 - 10000 ppm 0 - 30000 ppm |
| 02 | Petrol fumes | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 03 | Carbon monoxide (CO) | 100 / 200 ppm | 0 - 500 ppm |
| 04 | Hydrogen (H2) | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 05 | LPG (Liquid Petroleum Gas) | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 06 | Propane | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 07 | Ammonia (NH3) | 100 / 200 ppm | 0 - 500 ppm |
| 08 | Ammonia (NH3) | 1000 / 2000 PPM | 0 - 2000 ppm |
| 09 | Acetylene | 15/30 % L.I.E. | 0 - 100% L.I.E. |
| 10 | Oxygen (Excess) | 24% / 27% | 21 - 42% volume |
| 11 | Oxygen (Lack) | 18% / 15% | 21 - 0% volume |

Table 2

| Code t | Technology of sensitive element of detector |
|--------|---|
| S | Semiconductor |
| С | catalytic |
| P | Pellistor |
| Н | Electrochemical cell |
| IR | infrared |

Table 3

| Code ii | Type of interface |
|---------|--|
| RL | 3 Relays (Alarm, Pre-alarm and Fault) |
| AS-C | Connection with conventional line (provides Pre-alarm, Alarm and Fault signalling. One detector only per line) |
| AS-M | Connection for addressable Input module – Inim model EM312SR |
| 42 | 4-20 mA module |
| LE | Direct connection to Inim Loop |
| MB | MODBUS |

Order code table

Detector with Semiconductor sensitive element in IP55 enclosure

Suitable for environments with clean and dry air

| 18 | 42 | RL | AS-M | AS-C | LE | MB | |
|--------------------|------------|------------|--|---|---------------------------------|-----------------------|------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conven- tional control panels | Direct connection to Inim loops | For MODBUS connection | Sensor sensor |
| Methane | ING700S-42 | ING700S-RL | ING700S-AS-M | ING700S-AS-C | ING700S-LE | ING700S-MB | INRG-700S |
| GPL | ING705S-42 | ING705S-RL | ING705S-AS-M | ING705S-AS-C | ING705S-LE | ING705S-MB | INRG-705S |
| Propane | ING706S-42 | ING706S-RL | ING706S-AS-M | ING706S-AS-C | ING706S-LE | ING706S-MB | INRG-706S |
| Ammonia (500 ppm) | ING707S-42 | ING707S-RL | ING707S-AS-M | ING707S-AS-C | ING707S-LE | ING707S-MB | INRG-707S |
| Ammonia (2000 ppm) | ING708S-42 | ING708S-RL | ING708S-AS-M | ING708S-AS-C | ING708S-LE | ING708S-MB | INRG-708S |

| 96000 | 42 | RL | AS-M | AS-C | LE | MB | |
|---|--------------------------------|-----------------------------|---|--|--|--|-----------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim loops | For MODBUS connection | Replacement sensor |
| Methane | INE700S-42 | INE700S-RL | INE700S-AS-M | INE700S-AS-C | INE700S-LE | INE700S-MB | INRE-700S |
| GPL | INE705S-42 | INE705S-RL | INE705S-AS-M | INE705S-AS-C | INE705S-LE | INE705S-MB | INRE-705S |
| Propane | INE706S-42 | INE706S-RL | INE706S-AS-M | INE706S-AS-C | INE706S-LE | INE706S-MB | INRE-706S |
| Ammonia (500 ppm) | INE707S-42 | INE707S-RL | INE707S-AS-M | INE707S-AS-C | INE707S-LE | INE707S-MB | INRE-707S |
| Ammonia (2000 ppm) | INE708S-42 | INE708S-RL | INE708S-AS-M | INE708S-AS-C | INE708S-LE | INE708S-MB | INRE-708S |
| | talytic element in IP5! | 5 enclosure | | | Suitabl | e for environments | with light pollution |
| II | 42 | RL | AS-M | AS-C | LE | MB | |
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Methane | ING700C-42 | ING700C-RL | ING700C-AS-M | ING700C-AS-C | ING700C-LE | ING700C-MB | INRG-700C |
| Hazard gases* | ING701C-42 | ING701C-RL | ING701C-AS-M | ING701C-AS-C | ING701C-LE | ING701C-MB | INRG-701C |
| Petrol fumes | ING702C-42 | ING702C-RL | ING702C-AS-M | ING702C-AS-C | ING702C-LE | ING702C-MB | INRG-702C |
| Hydrogen | ING704C-42 | ING704C-RL | ING704C-AS-M | ING704C-AS-C | ING704C-LE | ING704C-MB | INRG-704C |
| GPL | ING705C-42 | ING705C-RL | ING705C-AS-M | ING705C-AS-C | ING705C-LE | ING705C-MB | INRG-705C |
| Propane | ING706C-42 | ING706C-RL | ING706C-AS-M | ING706C-AS-C | ING706C-LE | ING706C-MB | INRG-706C |
| Acetylene | ING709C-42 | ING709C-RL | ING709C-AS-M | ING709C-AS-C | ING709C-LE | ING709C-MB | INRG-709C |
| Detectors with sensitive ca | talytic element in ATE 42 | X enclosure RL | AS-M | AS-C | Suitable | e for environments MB | with light pollutio |
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Methane | INE700C-42 | INE700C-RL | INE700S-AS-M | INE700C-AS-C | INE700C-LE | INE700C-MB | INRE-700C |
| Hazard gases* | INE701C-42 | INE701C-RL | INE701S-AS-M | INE701C-AS-C | INE701C-LE | INE701C-MB | INRE-701C |
| Petrol fumes | INE702C-42 | INE702C-RL | INE702S-AS-M | INE702C-AS-C | INE702C-LE | INE702C-MB | INRE-702C |
| Hydrogen | INE704C-42 | INE704C-RL | INE704S-AS-M | INE704C-AS-C | INE704C-LE | INE704C-MB | INRE-704C |
| GPL | INE705C-42 | INE705C-RL | INE705S-AS-M | INE705C-AS-C | INE705C-LE | INE705C-MB | INRE-705C |
| Propane | INE706C-42 | INE706C-RL | INE706S-AS-M | INE706C-AS-C | INE706C-LE | INE706C-MB | INRE-706C |
| Acetylene | INE709C-42 | INE709C-RL | INE709S-AS-M | INE709C-AS-C | INE709C-LE | INE709C-MB | INRE-709C |
| | scitive element in IDE | enclosure | | | | Suitable for poll | uted environmen |
| Detectors with pellistor ser | isitive element in 155 | | | | | | |
| Detectors with pellistor ser | 42 | RL | AS-M | AS-C | LE | MB | |
| Detectors with pellistor ser | | RL Relay | AS-M For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Replacement sensor |
| | 42 | | For connection to Inim addressable | For connection to SmartLine conventional | Direct connection | For MODBUS | |
| Methane | 42 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | |
| Methane Hazard gases* | 4-20 mA | Relay ING700P-RL | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | INRG-700P |
| Methane Hazard gases* Petrol fumes Hydrogen | 4-20 mA ING700P-42 ING701P-42 | Relay ING700P-RL ING701P-RL | For connection to Inim addressable modules ING700P-AS-M ING701P-AS-M | For connection to SmartLine conventional control panels ING700P-AS-C | Direct connection to Inim Loops ING700P-LE ING701P-LE | For MODBUS connection ING700P-MB ING701P-MB | INRG-700P |

GPL

Propane

Acetylene

ING705P-RL

ING706P-RL

ING709P-RL

ING705P-AS-M

ING706P-AS-M

ING709P-AS-M

ING705P-AS-C

ING706P-AS-C

ING709P-AS-C

ING705P-LE

ING706P-LE

ING709P-LE

ING705P-MB

ING706P-MB

ING709P-MB

ING705P-42

ING706P-42

ING709P-42

INRG-705P INRG-706P

INRG-709P

GAS DETECTION INDUSTRIAL SERIES



| Detector with pellistor sensitiv | Detector with pellistor sensitive element in ATEX enclosure Suitable for polluted environments | | | | | | | | | |
|----------------------------------|---|------------|--|--|---------------------------------------|-----------------------|------------------|--|--|--|
| 1000 | 42 | RL | AS-M | AS-C | LE | MB | | | | |
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panel terminals | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor | | | |
| Methane | INE700P-42 | INE700P-RL | INE700P-AS-M | INE700P-AS-C | INE700P-LE | INE700P-MB | INRE-700P | | | |
| Hazard gases* | INE701P-42 | INE701P-RL | INE701P-AS-M | INE701P-AS-C | INE701P-LE | INE701P-MB | INRE-701P | | | |
| Petrol fumes | INE702P-42 | INE702P-RL | INE702P-AS-M | INE702P-AS-C | INE702P-LE | INE702P-MB | INRE-702P | | | |
| Hydrogen | INE704P-42 | INE704P-RL | INE704P-AS-M | INE704P-AS-C | INE704P-LE | INE704P-MB | INRE-704P | | | |
| GPL | INE705P-42 | INE705P-RL | INE705P-AS-M | INE705P-AS-C | INE705P-LE | INE705P-MB | INRE-705P | | | |
| Propane | INE706P-42 | INE706P-RL | INE706P-AS-M | INE706P-AS-C | INE706P-LE | INE706P-MB | INRE-706P | | | |

Detector with pellistor sensitive element in ATEX enclosure with LCD touch screen display

Suitable for polluted environments

| | 42 | RL | AS-M | AS-C | LE | MB | |
|---------------|-------------|-------------|--|---|---------------------------------|-----------------------|-----------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panel terminals | Direct connection to Inim Loops | For MODBUS connection | Replacement sensor |
| Methane | INE700PT-42 | INE700PT-RL | INE700PT-AS-M | INE700PT-AS-C | INE700PT-LE | INE700PT-MB | INRE-700P |
| Hazard gases* | INE701PT-42 | INE701PT-RL | INE701PT-AS-M | INE701PT-AS-C | INE701PT-LE | INE701PT-MB | INRE-701P |
| Petrol fumes | INE702PT-42 | INE702PT-RL | INE702PT-AS-M | INE702PT-AS-C | INE702PT-LE | INE702PT-MB | INRE-702P |
| Hydrogen | INE704PT-42 | INE704PT-RL | INE704PT-AS-M | INE704PT-AS-C | INE704PT-LE | INE704PT-MB | INRE-704P |
| GPL | INE705PT-42 | INE705PT-RL | INE705PT-AS-M | INE705PT-AS-C | INE705PT-LE | INE705PT-MB | INRE-705P |
| Propane | INE706PT-42 | INE706PT-RL | INE706PT-AS-M | INE706PT-AS-C | INE706PT-LE | INE706PT-MB | INRE-706P |
| Acetylene | INE709PT-42 | INE709PT-RL | INE709PT-AS-M | INE709PT-AS-C | INE709PT-LE | INE709PT-MB | INRE-709P |

Detectors with Electrochemical Cell type sensitive element in IP55 enclosure

Suitable for toxic gas detection (measuring in ppm)

| 107 | 42 | RL | AS-M | AS-C | LE | MB | |
|----------------------------|--------------|--------------|--|--|---------------------------------|-----------------------|------------------|
| Total Control | 42 | KL | A5-IVI | AS-C | LE | IVID | - |
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Nitrogen dioxide | ING701H-42 | ING701H-RL | ING701H-AS-M | ING701H-AS-C | ING701H-LE | ING701H-MB | INRG-701H |
| Carbon monoxide | ING703H-42 | ING703H-RL | ING703H-AS-M | ING703H-AS-C | ING703H-LE | ING703H-MB | INRG-703H |
| Carbon monoxide EN50545 | ING703HPK-42 | ING703HPK-RL | ING703HPK-AS-M | ING703HPK-AS-C | ING703HPK-LE | ING703HPK-MB | INRG-703HPK |
| Ammonia (500 ppm) | ING707H-42 | ING707H-RL | ING707H-AS-M | ING707H-AS-C | ING707H-LE | ING707H-MB | INRG-707H |
| Ammonia (2000 ppm) | ING708H-42 | ING708H-RL | ING708H-AS-M | ING708H-AS-C | ING708H-LE | ING708H-MB | INRG-708H |
| Oxygen (Excess) | ING710H-42 | ING710H-RL | ING710H-AS-M | ING710H-AS-C | ING710H-LE | ING710H-MB | INRG-710H |
| Oxygen (Defect) | ING711H-42 | ING711H-RL | ING711H-AS-M | ING711H-AS-C | ING711H-LE | ING711H-MB | INRG-711H |

Detectors with Electrochemical Cell type sensitive element in ATEX enclosure

Suitable for toxic gas detection (measuring in ppm)

| 5000 | 42 | RL | AS-M | AS-C | LE | МВ | |
|--------------------|------------|------------|--|--|---------------------------------------|-----------------------|------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Nitrogen dioxide | INE701H-42 | INE701H-RL | INE701H-AS-M | INE701H-AS-C | INE701H-LE | INRE-701H-MB | INRE-701H |
| Carbon monoxide | INE703H-42 | INE703H-RL | INE703H-AS-M | INE703H-AS-C | INE703H-LE | INRE-703H-MB | INRE-703H |
| Ammonia (500 ppm) | INE707H-42 | INE707H-RL | INE707H-AS-M | INE707H-AS-C | INE707H-LE | INRE-707H-MB | INRE-707H |
| Ammonia (2000 ppm) | INE708H-42 | INE708H-RL | INE708H-AS-M | INE708H-AS-C | INE708H-LE | INRE-708H-MB | INRE-708H |
| Oxygen (Excess) | INE710H-42 | INE710H-RL | INE710H-AS-M | INE710H-AS-C | INE710H-LE | INRE-710H-MB | INRE-710H |
| Oxygen (Defect) | INE711H-42 | INE711H-RL | INE711H-AS-M | INE711H-AS-C | INE711H-LE | INRE-711H-MB | INRE-711H |

Detectors with Electrochemical Cell type sensitive element

Suitable for toxic gas detection (measuring in ppm)

| | 42 | RL | AS-M | AS-C | LE | MB | |
|--------------------|-------------|-------------|--|---|------------------------------------|-----------------------|------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panel terminals | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Nitrogen dioxide | INE701HT-42 | INE701HT-RL | INE701HT-AS-M | INE701HT-AS-C | INE701HT-LE | INE701HT-MB | INRE-701H |
| Carbon monoxide | INE703HT-42 | INE703HT-RL | INE703HT-AS-M | INE703HT-AS-C | INE703HT-LE | INE703HT-MB | INRE-703H |
| Ammonia (500 ppm) | INE707HT-42 | INE707HT-RL | INE707HT-AS-M | INE707HT-AS-C | INE707HT-LE | INE707HT-MB | INRE-707H |
| Ammonia (2000 ppm) | INE708HT-42 | INE708HT-RL | INE708HT-AS-M | INE708HT-AS-C | INE708HT-LE | INE708HT-MB | INRE-708H |
| Oxygen (Excess) | INE710HT-42 | INE710HT-RL | INE710HT-AS-M | INE710HT-AS-C | INE710HT-LE | INE710HT-MB | INRE-710H |
| Oxygen (Defect) | INE711HT-42 | INE711HT-RL | INE711HT-AS-M | INE711HT-AS-C | INE711HT-LE | INE711HT-MB | INRE-711H |

Detectors with infrared sensitive element in IP55 enclosure

Suitable for selective measure of specific gases

| M. | 42 | RL | AS-M | AS-C | LE | MB | |
|---------------------------|-------------|-------------|--|--|---------------------------------------|-----------------------|------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Methane | ING700IR-42 | ING700IR-RL | ING700IR-AS-M | ING700IR-AS-C | ING700IR-LE | ING700IR-MB | INRG-700IR |
| Carbon Dioxide / Butane** | ING701IR-42 | ING701IR-RL | ING701IR-AS-M | ING701IR-AS-C | ING701IR-LE | ING701IR-MB | INRG-701IR |
| GPL | ING705IR-42 | ING705IR-RL | ING705IR-AS-M | ING705IR-AS-C | ING705IR-LE | ING705IR-MB | INRG-705IR |
| Propane | ING706IR-42 | ING706IR-RL | ING706IR-AS-M | ING706IR-AS-C | ING706IR-LE | ING706IR-MB | INRG-706IR |

Detectors with infrared sensitive element in ATEX enclosure

Suitable for selective measure of specific gases

| | 42 | RL | AS-M | AS-C | LE | MB | |
|------------------------------|-------------|-------------|--|--|---------------------------------------|-----------------------|------------------|
| 6 | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Methane | INE700IR-42 | INE700IR-RL | INE700IR-AS-M | INE700IR-AS-C | INE700IR-LE | INE700IR-MB | INRE-700IR |
| Carbon Dioxide / Butane** | INE701IR-42 | INE701IR-RL | INE701IR-AS-M | INE701IR-AS-C | INE701IR-LE | INE701IR-MB | INRE-701IR |
| GPL | INE705IR-42 | INE705IR-RL | INE705IR-AS-M | INE705IR-AS-C | INE705IR-LE | INE705IR-MB | INRE-705IR |
| Propane | INE706IR-42 | INE706IR-RL | INE706IR-AS-M | INE706IR-AS-C | INE706IR-LE | INE706IR-MB | INRE-706IR |

^{**}To be specified in the order:

- Detectable gas type (Carbon Dioxide or Butane)
 Threshold for Carbon Dioxide (1000/2000ppm, 4000/8000ppm or 10000/20000ppm)
 Measuring range for Carbon Dioxide (0 10000ppm or 0 30000 ppm)

GAS DETECTION INDUSTRIAL SERIES



Detectors with infrared sensitive element in ATEX enclosure with LCD touch screen display

Suitable for selective measure of specific gases

10 m/S

| | 42 | RL | AS-M | AS-C | LE | MB | |
|------------------------------|--------------|--------------|--|--|---------------------------------------|-----------------------|------------------|
| | 4-20 mA | Relay | For connection to Inim addressable modules | For connection to SmartLine conventional control panels | Direct connection to Inim Loops | For MODBUS connection | Sensor sensor |
| Methane | INE700IRT-42 | INE700IRT-RL | INE700IRT-AS-M | INE700IRT-AS-C | INE700IRT-LE | INE700IRT-MB | INRE-700IR |
| Carbon Dioxide / Butane** | INE701IRT-42 | INE701IRT-RL | INE701IRT-AS-M | INE701IRT-AS-C | INE701IRT-LE | INE701IRT-MB | INRE-701IR |
| GPL | INE705IRT-42 | INE705IRT-RL | INE705IRT-AS-M | INE705IRT-AS-C | INE705IRT-LE | INE705IRT-MB | INRE-705IR |
| Propane | INE706IRT-42 | INE706IRT-RL | INE706IRT-AS-M | INE706IRT-AS-C | INE706IRT-LE | INE706IRT-MB | INRE-706IR |

^{**}To be specified in the order:

- Detectable gas type (Carbon Dioxide or Butane)
- Threshold for Carbon Dioxide (1000/2000ppm, 4000/8000ppm or 10000/20000ppm)
- Measuring range for Carbon Dioxide (0 10000ppm or 0 30000 ppm)

| Technical features | | | | |
|-----------------------------|-------------------------|---------------|--|--|
| Supply voltage | 11 – 30 Vdc | | | |
| | Semiconductor sensors | 50 mA | | |
| Standby current consumption | Catalytic sensors | 70 mA | | |
| | Electrochemical sensors | 30 mA | | |
| | Semiconductor sensors | 80 mA | | |
| Alarm current consumption | Catalytic sensors | 100 mA | | |
| | Electrochemical sensors | 60 mA | | |
| Operating temperature | from 0 to | o +40°C | | |
| Matala | IP55 enclosure | 370 g | | |
| Weight | ATEX enclosure | 1000g | | |
| | IP55 enclosure | 141x100x60 mm | | |
| Dimensions | ATEX enclosure | 165x90x80 mm | | |

Accessory items

INA55-701 – Gas detector to Android SmartPhone interface

Interfaces the gas detector to a smartphone with Android operative system, allows you to read and change the detector parameters and simulate pre-alarm, alarm and fault status. Complete with CD containing the required App.

INB55 – 1 litre tester canister for gas detectors

Functionality tester for gas detectors, to be used by qualified persons only, sufficient for approximately 8 tests.

INA55-104 – Valve for test cylinders

INA55-108 – Cup for test aerosol delivery

Maximum ambient air speed in the protected ambient

INA55-109 – Stainless steel mounting bracket for ATEX standard detectors (without display)

INA55-110 – Valve with Flowmeter

| Disposable canisters | Gas |
|----------------------|--|
| INB55-100 | Propane 20% L.I.E., suitable for LPG detectors also |
| INB55-101 | Propane 40% L.I.E., suitable for LPG detectors also |
| INB55-102 | Methane 20% L.I.E. |
| INB55-103 | Methane 40% L.I.E. |
| INB55-104 | Hydrogen 20% L.I.E. |
| INB55-105 | Hydrogen 40% L.I.E. |
| INB55-106 | Acetylene 20% L.I.E. |
| INB55-107 | Acetylene 40% L.I.E. |
| INB55-108 | Carbon monoxide, 100 ppm |
| INB55-109 | Carbon monoxide, 200 ppm |
| INB55-110 | Oxygen 27% Volume |
| INB55-111 | Isobutane 20% L.I.E., suitable for petrol fumes detectors also |
| INB55-112 | Isobutane 40% L.I.E., suitable for petrol fumes detectors also |
| INB55-113 | Oxygen 15% Volume |



Elite gas detector series





The detectors from the ELITE series represent excellence in the field of gas detection, the multiple technologies available (catalytic, pellistor, electrochemical or infrared sensitive elements), the wide range of detectable gases, the ease-of-use and trouble-free maintenance combined with the quality and reliability that distinguish these devices makes the ELITE series a unique product range of its kind. Two buttons on-board each detector

(F1 and F2) allow you to carry out tool-free calibration and maintenance operations. Trouble-free maintenance allows you to directly replace the cartridge with the sensitive element without need of calibration.

The detectors are available in either IP55 or explosion-proof enclosures for use in potentially explosive areas (II 2 G Ex d IIC T6 Gb).

| Gas detected | Sensitive element | 3 relay Output + fault and 4-20mA | | e element 4-20mA module Mea | | 4-20mA module | | Measuring | • | | Calibration | Years* |
|----------------------|-------------------|--------------------------------------|-----------|-----------------------------|-----------|-------------------|-------|-----------|----------|---|-------------|--------|
| | technology | IP55 | ATEX | IP55 | ATEX | range | IP55 | ATEX | canister | | | |
| | CATALYTIC | SE237KM | SE138KM | TS282KM | TS293KM | 0 - 20% LIE | ZSK02 | ZSK02/EX | BO200 | 5 | | |
| Methane | PELLISTOR | SE237PM | SE138PM | TS282PM | TS293PM | 0 - 100% LIE | ZSP05 | ZSP05/EX | BO200 | 5 | | |
| | INFRARED | | | | TS293IM | 0 - 100% LIE | | | BO200 | | | |
| | CATALYTIC | SE237KG | SE138KG | TS282KG | TS293KG | 0 - 20% LIE | ZSK02 | ZSK02/EX | BO200 | 5 | | |
| GPL | PELLISTOR | SE237PG | SE138PG | TS282PG | TS293PG | 0 - 100% LIE | ZSP05 | ZSP05/EX | BO200 | 5 | | |
| | INFRARED | | | | TS293IG | 0 - 100% LIE | | | BO200 | | | |
| I li calma acasa | CATALYTIC | SE237KI | SE138KI | TS282KI | TS293KI | 0 - 20% LIE | ZSK02 | ZSK02/EX | BO200 | 5 | | |
| Hydrogen | PELLISTOR | SE237PI | SE138PI | TS282PI | TS293PI | 0 - 100% LIE | ZSP05 | ZSP05/EX | BO200 | 5 | | |
| Datual | CATALYTIC | SE237KB | SE138KB | TS282KB | TS293KB | 0 - 20% LIE | ZSK04 | ZSK04/EX | BO200 | 5 | | |
| Petrol | PELLISTOR | SE237PB | SE138PB | TS282PB | TS293PB | 0 - 100% LIE | ZSP05 | ZSP05/EX | BO200 | 5 | | |
| Ai- | ELECTROCHEMICAL | SE237EA | SE138EA | TS282EA | TS293EA | 0 - 300 ppm | ZSEA1 | ZSEA1/EX | BO501 | 3 | | |
| Ammonia | ELECTROCHEMICAL | SE237EA-H | SE138EA-H | TS282EA-H | TS293EA-H | 0 - 300 ppm | | | BO501 | | | |
| Carbon mon- | ELECTROCHEMICAL | SE237EC-S | SE138EC-S | TS282EC-S | TS293EC-S | 0 - 300 ppm | ZSEC1 | ZSEC1/EX | BO210 | 3 | | |
| oxide | ELECTROCHEMICAL | SE237EC-H | SE138EC-H | TS282EC-H | TS293EC-H | 0 - 300 ppm | | ZSEC2/EX | BO210 | 2 | | |
| Hydrogen Sulphide | ELECTROCHEMICAL | SE237EH | SE138EH | TS282EH | TS293EH | 0 - 100 ppm | ZSEH1 | ZSEH1/EX | BO470 | 2 | | |
| Nitrogen Oxide | ELECTROCHEMICAL | SE237EN | SE138EN | TS282EN | TS293EN | 0 - 300 ppm | ZSEN1 | ZSEN1/EX | BO472 | 2 | | |
| Nitrogen dioxide | ELECTROCHEMICAL | SE237EN2 | SE138EN2 | TS282EN2 | TS293EN2 | 0 - 30 ppm | ZSEN2 | ZSEN2/EX | BO018 | 2 | | |
| Oxygen** | ELECTROCHEMICAL | SE237EO | SE138E0 | | | 0 - 25% Volume | ZSEO1 | ZSEO1/EX | BO015 | 2 | | |
| Sulfur Dioxide | ELECTROCHEMICAL | SE237ES | SE138ES | TS282ES | TS293ES | 0 - 20 ppm | ZSES1 | ZSES1/EX | BO418 | 2 | | |

^{**}Not connectible as 4-20 mA to I/O terminals of SmartLine.

GAS DETECTION ELITE SERIES



| Gas detected | Sensitive element | | ut + fault and) mA | 4-20 mA module | | Measuring Replacement car | | cartridge | Calibration | |
|---|-------------------|-----------|------------------------|----------------|------------|---------------------------|---------------|-----------|------------------|---|
| | technology | IP55 | ATEX | IP55 | ATEX | range | IP55 | ATEX | canister | |
| Acetylene | PELLISTOR | | SE138PE | | TS293PE | 0 - 100% LIE | | ZSP02/EX | BO200 | 5 |
| Styrene | PELLISTOR | | SE138PS | | TS293PS | 0 - 100% LIE | | ZSP03/EX | BO200 | 5 |
| Hydrocyanic Acid | ELECTROCHEMICAL | SE237EHCN | SE138EHCN | TS282EHCN | | 0 - 10 ppm | ZSEHCN | | B0479 | 2 |
| Hydrochloric Acid | ELECTROCHEMICAL | SE237EHCL | SE138EHCL | TS282EHCL | TS293EHCL | 0 - 30 ppm | ZSEHCL | ZSEHCL/EX | WR000 | 2 |
| | CATALYTIC** | SE237KX | SE138KX | | | 0 - 20% LIE | | | BO200 | 5 |
| Hazard gases | PELLISTOR** | SE237PX | SE138PX | TS282PX | TS293PX | 0 - 100% LIE | ZSP05 | ZSP05/EX | BO200 | 5 |
| (by request) | PELLISTOR*** | | SE138PX-H | | TS293PX-H | 0 - 100% LIE | | | BO200 | 5 |
| | INFRARED*** | | | | TS293IX | 0 - 100% LIE | | | | |
| Carbon dioxide | | | | TS282IC2 | TS293IC2 | 0 – 5% Vol. | | | | |
| Carbon dioxide | INFRARED | | | TS282IC2-H | TS293IC2-H | 0 – 5000 ppm | | | | |
| CO + Petrol Fumes (for park- ing areas) | CATALYTIC | | | TS255CB | | | ZSEC1 - ZSK04 | | BO200 / BO210 | |
| CO + Nitrogen Dioxide | ELECTROCHEMICAL | | | TS255CN2 | | | ZSEC1 - ZSEN2 | | BO008 / BO018 | |

^{*}Average life in clean air (years).

Accessory items









TC011 – Calibration kit for ELITE gas detectors comprising calibration cap and flow meter.

TC014 – Calibration kit for ELITE gas detectors comprising calibration cap and flow meter in stainless steel for highly reactive gas.

BO303 – S-Flow valve for 34-58-110ltr canisters. Inert gases, Hydrogen Sulphide, Sulfur Dioxide, Ammonia. With flow meter and manometer.

BO305 – HPC valve in stainless steel for 34 – 58 – 110ltr canisters. Reactive and highly reactive gases. With manometer.

BO311 – Miniflow valve for 12ltr canisters. Inert gases, Hydrogen Sulphide, Sulfur Dioxide, Ammonia. With flow meter and manometer.

TR530 – Aluminium bracket for wall or ceiling mount of SE137 / SE138 / TS220 / TS293 series detectors.

AR015 – Stainless steel cover for TR530 bracket for SE137 / SE138 / TS220 / TS293 series detectors.

TR533 - Mechanical protection against accident impacts.

^{**}Ethyl acetate, Acetone, Isopropolic alcohol, Ammonia, Heptane, Hexane, Ethanol (Ethyl alcohol).

^{***}Acetone, Tertiary Butyl alcohol, Butyl alcohol-n, Isobutyl alcohol, Isopropolic alcohol (2-Propanol), Prolipic alcohol (1-Propanol), Ammonia, Petrol (green), Butane, Butene-2-trans, Butene-1, Butene-2cis (Butene-2), Cyclohexane, Decan, Heptane, Hexane, Ethanol (Ethyl alcohol), Ethylene, Hydrogen, Iso-butane, Iso-pentane, Methane, Methyl ethyl ketone (Butanone), Nitromethane, Nonane, Carbon monoxide, Octane-n.



Visual/Audible signaling devices

Sounders, bells, flashers and fire signs for analogue-addressable and conventional control panels

One of the roles of primary importance in fire detection systems is covered by audible/visual alarm signalling devices. Sounders, bells and flashers are some of the most common means of

providing warning of fire. Sounders, bells and strobe lights are just some of the devices INIM offers in its extensive product line-

IS2010RE – Wall mount audible alarm signaller. Red IS2010WE – Wall mount audible alarm signaller. White

Audible alarm signaller, operates at 18 to 30 Vdc, IP65 protection grade
The EDRV2000 manual programmer allows the

selection of the alarm tone from the 14 available and also volume adjustment.





| Tone | 14 selectable via EDRV2000 |
|----------------------|----------------------------|
| Sound output @ 1m | MAX. 101 dB |
| IP protection rating | IP65 |
| Operating voltage | 18 – 30 Vdc |

| Consumption | From 10 to 40mA (depending on the selected tone) |
|-----------------------|--|
| Operating temperature | from -10°C to +55°C |
| Weight | 150 g |
| Dimensions | 121 x 121 x 57 mm |

IS2011RE – Wall mount audible alarm signaller with low power consumption. Red IS2011WE – Wall mount audible alarm signaller with low power consumption. White

Audible alarm signaller, operates at 20 to 30 Vdc, IP65 protection grade.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available and volume adjustment.





| Tone | 14 selectable via DIP SWITCH | | |
|----------------------|------------------------------|--|--|
| Sound output @ 1m | MAX. 101 dB | | |
| IP protection rating | IP65 | | |
| Operating voltage | 20 – 30 Vdc | | |

| Consumption | From 1.4 to 5 mA (depending on the selected tone) |
|-----------------------|---|
| Operating temperature | from -10°C to +55°C |
| Weight | 150 g |
| Dimensions | 121 x 121 x 57 mm |

IS2020RE – Wall mount visual/audible alarm signaller. Red IS2020WE – Wall mount visual/audible alarm signaller. White

Visual/Audible alarm signaller, operates at 18 to 30 Vdc, IP65 protection grade.

The EDRV2000 manual programmer allows

selection of the alarm tone from the 14 available as well as volume and flasher intensity adjustment.





| Tone | 14 selectable via EDRV2000 | | | |
|-------------------------|----------------------------|-----------------------------|--|--|
| Sound output @ 1m | MAX. 101 dB | | | |
| Viewel reason (ENEA 22) | High Power | W-3.5-10.2, O-3.5-10.5-10.0 | | |
| Visual range (EN54-23) | Low Power | W-2.8-7, O-2.8-7.5-7 | | |
| IP protection rating | IP65 | | | |

| Operating voltage | 18 – 30 Vdc | |
|-----------------------|--|--|
| Consumption | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | from -10°C to +55°C | |
| Weight | 150 g | |
| Dimensions | 121 x 121 x 57 mm | |

IS2021RE – Wall mount visual/audible alarm signaller with low power consumption. Red IS2021WE – Wall mount visual/audible alarm signaller with low power consumption. White

Visual/Audible alarm signaller, operates at 20 to 30 Vdc, IP65 protection grade.

The DIP SWITCH allows selection of the alarm

tone from the 14 tones available as well as volume and flasher intensity adjustment.

| 10 | |
|----|--|
| | |
| | |



| Tone | 14 selectable via DIP SWITCH | | | |
|------------------------|------------------------------|--------------------|--|--|
| Sound output @ 1m | MAX. 101 dB | | | |
| | High Power | W-3.5-7, O-3.5-8-7 | | |
| Visual range (EN54-23) | Low Power W-3-6.5, O-3-8-6.5 | | | |
| IP protection rating | IP65 | | | |

| Operating voltage | 20 – 30 Vdc | | |
|-----------------------|--|--|--|
| Consumption | From 1.4 to 23 mA (depending on the selected tone) | | |
| Operating temperature | from -10°C to +55°C | | |
| Weight | 150 g | | |
| Dimensions | 121 x 121 x 57 mm | | |





IS2030RE – Wall mount audible alarm signaller with voice alarm. Red IS2030WE – Wall mount audible alarm signaller with voice alarm. White

Audible alarm signaller with voice functions, operate at 18 to 30 Vdc, IP65 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages from the 14

tones and 16 voice messages available in 8 different languages on-board the device as well as volume adjustment. The EDRV2000 also provides for the customization of tones and voice messages.





| Tone | 14 + 16 voice messages selectable via EDRV2000 |
|----------------------|---|
| Sound output @ 1m | MAX. 101 dB |
| IP protection rating | IP65 |
| Operating voltage | 18 – 30 Vdc |

| Consumption | From 10 to 40mA (depending on the selected tone) | | |
|-----------------------|--|--|--|
| Operating temperature | from -10°C to +55°C | | |
| Weight | 150 g | | |
| Dimensions | 121 x 121 x 57 mm | | |

IS2050RE – Visual/Audible signaller with voice alarm. Red IS2050WE – Visual/Audible signaller with voice alarm. White

Visual/Audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP65 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages from the 14 tones and 16 voice

messages available in 8 different languages onboard the device, as well as volume and flasher intensity adjustment.

The EDRV2000 also provides for the customization of tones and voice messages.





| Tone | 14 + 16 voice messages selectable via EDRV2000 | | |
|------------------------|---|-----------------------------|--|
| Sound output @ 1m | MAX. 101 dB | | |
| Visual range (EN54-23) | High Power | W-3.5-10.2, O-3.5-10.5-10.0 | |
| | Low Power W-2.8-7, O-2.8-7.5-7 | | |
| IP protection rating | IP65 | | |

| Operating voltage | 18 – 30 Vdc |
|-----------------------|--|
| Consumption | From 10 to 40mA (depending on the selected tone) |
| Operating temperature | from -10°C to +55°C |
| Weight | 150 g |
| Dimensions | 121 x 121 x 57 mm |

PLEXI_ES2000* – Signalling sign with placement for sounder installation

Transparent plexiglass panel with 'FIRE ALARM' warning (white wording on red background) and

Inim Logo. The panel is supplied with assembling kit and template. Dimensions: $430 \times 130 \times 4$ mm.



IS1010 - Ceiling mount audible alarm signaller

Ceiling mount audible alarm signaller, operates at 18 to 30 Vdc, IP21 protection rating.

The EDRV2000 manual programmer allows the selection of the alarm tone from the 14 available and also volume adjustment.



| Tone | 14 selectable via EDRV2000 | | |
|----------------------|----------------------------|--|--|
| Sound output @ 1m | MAX. 98 dB | | |
| IP protection rating | IP21 | | |
| Operating voltage | 18 – 30 Vdc | | |

| Consumption | From 10 to 25 mA (depending on the selected tone) | |
|-----------------------|---|--|
| Operating temperature | from -10°C to +55°C | |
| Weight | 155 g | |
| Dimensions | 112 x 112 x 37 mm | |

IS1011 - Ceiling mount audible alarm signaller with low-consumption

Ceiling mount audible alarm signaller, operates at 20 to 30 Vdc, IP21 protection rating.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available and volume adjustment.



| Tone | 14 selectable via DIP SWITCH | |
|----------------------|------------------------------|--|
| Sound output @ 1m | MAX. 98 dB | |
| IP protection rating | IP21 | |
| Operating voltage | 18 – 30 Vdc | |

| Consumption | From 1.4 to 5 mA (depending on the selected tone) | |
|-----------------------|---|--|
| Operating temperature | from -10°C to +55°C | |
| Weight | 155 g | |
| Dimensions | 112 x 112 x 37 mm | |

^{*} Refer to 'Accessory' section for available text.

IS1020 - Ceiling mount visual/audible alarm signaller

Ceiling mount visual/audible alarm signaller, operates at 18 to 30 Vdc, IP21 protection grade. The EDRV2000 manual programmer allows

selection of the alarm tone from the 14 available, adjustment of the volume and flasher intensity.



| Tone | 14 + 16 voice messages selectable via EDRV2000 | | |
|------------------------|---|--------|---------|
| Sound output @ 1m | MAX. 98 dB | | |
| Visual range (EN54-23) | High Power | C-3-10 | O-4-10 |
| | Low Power | C-3-9 | 0-3,5-9 |
| IP protection rating | IP21 | | |

| Operating voltage | 18 – 30 Vdc | |
|-----------------------|--|--|
| Consumption | From 10 to 40mA (depending on the selected tone) | |
| Operating temperature | from -10°C to +55°C | |
| Weight | 175 g | |
| Dimensions | 112 x 112 x 37 mm | |

IS1021 – Ceiling mount visual/audible alarm signaller, with low power consumption

Ceiling mount visual/audible alarm signaller, operates at 20 to 30 Vdc, IP21 protection grade.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available, adjustment of the volume and the flasher intensity.



| Tone | 14 + 16 voice messages selectable via EDRV2000 | | | |
|------------------------|---|-------|---------|--|
| Sound output @ 1m | MAX. 98 dB | | | |
| Visual range (EN54-23) | High Power | C-3-8 | 0-3,3-8 | |
| | Low Power | C-3-7 | O-3-7 | |
| IP protection rating | IP21 | | | |

| * | |
|-----------------------|--|
| Operating voltage | 20 – 30 Vdc |
| Consumption | From 1.4 to 23 mA (depending on the selected tone) |
| Operating temperature | from -10°C to +55°C |
| Weight | 175 g |
| Dimensions | 112 x 112 x 37 mm |

IS1030 – Audible alarm signaller with voice alarm

Ceiling mount audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP21 protection grade.

The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm

messages from the 14 tones and 16 voice messages available in 8 different languages onboard the device as well as volume adjustment. The EDRV2000 also provides for the customization of tones and voice messages.



| Tone | 14 + 16 voice messages selectable via EDRV2000 |
|----------------------|---|
| Sound output @ 1m | MAX. 98 dB |
| IP protection rating | IP21 |
| Operating voltage | 18 – 30 Vdc |

| Consumption | From 10 to 25 mA (depending on the selected tone) |
|-----------------------|---|
| Operating temperature | from -10°C to +55°C |
| Weight | 155 g |
| Dimensions | 112 x 112 x 37 mm |

IS1050 – Visual/Audible alarm signaller with voice alarm

Ceiling mount visual/audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP21 protection grade.

The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages

from the 14 tones and 16 voice messages available in 8 different languages on-board the device, as well as volume and flasher intensity adjustment.

The EDRV2000 also provides for the customization of tones and voice messages.



| Tone | 14 + 16 voice messages selectable via EDRV2000 | | |
|------------------------|---|--------|---------|
| Sound output @ 1m | MAX. 98 dB | | |
| Visual range (EN54-23) | High Power | C-3-10 | O-4-10 |
| | Low Power | C-3-9 | O-3,5-9 |
| IP protection rating | IP21 | | |

| Operating voltage | 18 – 30 Vdc |
|-----------------------|--|
| Consumption | From 10 to 40mA (depending on the selected tone) |
| Operating temperature | from -10°C to +55°C |
| Weight | 175 g |
| Dimensions | 112 x 112 x 37 mm |

ISO010RE – Audible alarm signaller. Red ISO010WE – Audible alarm signaller. White

ISO010RES – Audible alarm signaller with low-profile base. Red ISO010WES – Audible alarm signaller with low-profile base. White

Audible alarm signaller, operates at 17 to 60 Vdc, IP65 protection grade (IP21 for low-profile base version) complete with mounting base. Tone



| 32 tones selectable by means of a DIP Switch |
|---|
| 106 dB(A) adjustable to 86 dB(A) (depending on the selected tone) |
| IP65 (IP21 for the low-profile base) |
| 17 – 60 Vdc |
| From 4 to 41 mA (depending on tone) |
| |

| Current consumption – optical section | 5 mA |
|---------------------------------------|--|
| Operating temperature | -25 - +70°C |
| Wire Entry | 2X2 mm on the base |
| Weight | 250 g |
| Dimensions | Ø 98 mm h 104 mm (h 80 mm with low-profile base) |

Visual/Audible signaling devices

VISUAL / AUDIBLE SIGNALLING DEVICES

ISO120RE – Red sounder/beacon, deep base, for WALL mounting installation.

IS0120RS – Red sounder/beacon, shallow base, for WALL mounting installation.

ISO120REC - Red sounder/beacon, deep base, for CEILING mounting installation.

ISO120RSC – Red sounder/beacon, shallow base, for CEILING mounting installation.

ISO120WE - White sounder/beacon, deep base, for WALL mounting installation.

ISO120WEC – White sounder/beacon, deep base, for CEILING mounting installation.

Visual/Audible alarm signaller approved according new EN54-23 standard, IP65 protection grade (deep base version only), operating voltage from 17 to 60 Vdc, complete

with mounting base. Tone selectable from the 32 available by means of DIP SWITCH, flash frequency 0.5Hz / 1Hz (selectable by means of DIP SWITCH), volume selectable from 2 levels.





| Operating voltage | From 17 to 60 Vdc |
|---|------------------------------|
| Sound output @ 1m | 97 dB(A) |
| Tones | 32 selectable via DIP Switch |
| Consumption | 17 – 60 Vdc |
| Coverage pattern according to EN54- 23 | W-3.1-11.3 C-3-15 |

IS0030RE - High power sounder

These audible signalling devices operate at 10 to 60 Vdc. IP66 protection rating. Complete with mounting base. They provide 32 tones configured

by means of a DIP SWITCH. The volume is easily adjusted using the internal trimmer.



| Tone | 64 tones selectable by means of a DIP Switch |
|----------------------|---|
| Sound output @ 1m | 120 dB(A) configurable |
| IP protection rating | IP66 |
| Operating voltage | 10 – 60 Vdc |

| Current consumption – audible section | Up to a 550 mA (depending on the selected tone) |
|---------------------------------------|---|
| Operating temperature | -25°C - +70°C |
| Weight | 1.8 kg |
| Dimensions | 166 x 150 mm |

ISC010 – 6" bell ISC010E – 6" bell for outdoor use

Motorized bell operates at 19 to 28 Vdc, low current consumption, contains polarization diode.



| Sound output @ 1m | 95 dB(A) |
|----------------------|----------|
| IP protection rating | |
| ISCC010 | IP21 |
| ISCC010E | IP33C |
| Consumption | 20 mA |

| Consumption | 20 mA |
|-----------------------|---------------|
| Operating temperature | -10°C - +55°C |
| Weight | 920 g |
| Dimensions | 160 x 64 mm |
| | |

ISS022* – Audible/Visual sign with flasher ISS021* – Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling.

ISS022 has an EN54-23 certified optical

signalling.

Comes with 'Fire alarm' written on it, available with different indications on request.



| | ISS022 | ISS021 |
|------------------------|---------------------|--------------|
| Sound output @ 1 m | 92 | dB(A) |
| Light output | EN54-23 W 4,6 - 9,1 | / |
| Flash frequency | 1 Hz | / |
| Operating voltage | 11 – 30 Vdc | 18 – 30 Vdc |
| Consumption | 50 mA | 21mA (media) |
| Dimensions (w x h x d) | 293 x 13 | 0 x 75 mm |
| Operating temperature | from -10° | °C to +55°C |



^{*} Refer to 'Accessory' section for available text.



Self-powered sounder/flasher for outdoor installation

Ivy self-powered outdoor sounders for outdoor installation are especially designed for easy installation and programming. The plastic lid rotates on a horizontal axis with respect to the base and remains integral with it, leaving the installer free from the task of removing the lid which, on the contrary, offers a convenient work niche. Below the plastic cover is a solid metal undercover which contributes to making the structure extremely resistant.

The high intensity luminous signaller is obtained by means of high efficiency LEDs with reduced power consumption for longer autonomy.

Alarms can be triggered by power drop or by the activation of the ancillary START input. Ivy sounders are equipped with a test circuit that allows them to spot and report fault conditions instantly to the control panel via a fault output.

- Power input and alarm trigger
- Ancillary trigger input (START)
- Metal inner-shroud
- Super bright LED technology flasher



| Technical features | | | | |
|------------------------------|--------------------|--|--|--|
| Operating voltage | 24 Vdc | | | |
| Sound output (@ 24 Vdc - 3m) | MAX 103 dB (A) | | | |
| Protection rating | IP34 | | | |
| Dimensions (HxWxD) | 288 x 207 x 107 mm | | | |
| Weight | 2.7 Kg | | | |

Smarty*

Indoor siren with flasher

Italian design, Italian technology, Italian style. No compromise with Inim's Smarty Italian quality at the best price. The Smarty is fully microprocessor-controlled to ensure excellence in performance. Uses piezoelectric sounder and super bright LED-technology flasher. A direct

move towards superior signalling features and low power consumption.

- Piezoelectric sounder
- Super bright LED technology flasher



75 x 112 x 30 mm

| Supply voltage | 24 Vdc |
|------------------------------|----------------|
| Current consumption | MAX 50 mA |
| Sound output (@ 24 Vdc - 1m) | MAX 105 dB (A) |
| Light Intensity (1m) | 25 lux |
| Protection rating | IP31 |
| Operating temperature | 0 / 50 °C |

Dimensions (HxWxD): Weight 110 g

Technical features

ORDER CODES

IVY-R

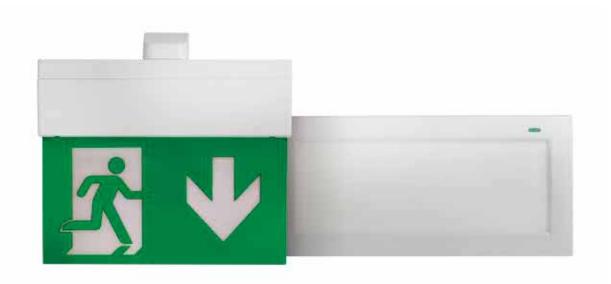
Self-powered sounder/flasher for outdoor installation.

^{*} Not for EU market.

EMERGENCY LIGHTING HARPER

Harper lamps

Emergency lighting



Harper series emergency-lighting and signalling lamps are designed for direct connection to the detection Loop* of Previdia and SmartLoop control panels. The connection of Harper lamps to Previdia and SmartLoop fire detection and signalling control panels permits:

- turn on/off of the emergency lamps in function of the status of the detection system, in this way it is possible to keep the lamps in Low-light mode or Off mode during normal conditions and activate them at full intensity in the event of an alarm;
- activation and deactivation of the emergency warning lamps

- in function of detected alarms, thus permitting appropriate signalling of the most effective escape route;
- adjustment of lamp-light intensity during non-emergency conditions (Previdia only);
- compliance with lamp maintenance cycles, the control panel is capable of managing various tests on groups of lamps (functional tests and internal battery life tests) and of storing the respective data; detailed test reports can be generated during these maintenance sessions in compliance with the reference standard (EN50172).

Technology

The light source of the HARPER emergency light series is an optimal blend of new generation long-life LEDs rated to over 50 thousand hours, high light output, low energy consumption and, thanks to an exclusive patented optical lighting design, highly effective glare-free technology that complies with all regulations

regarding photobiological safety. The durability and performance of HARPER emergency lights is further enhanced by new LiFePO $_4$ long-life batteries which are smaller and more environment-friendly than standard nickel-cadmium or nickel-metal hydride batteries.

Our selection

The vast product lineup of the HARPER range provides for every installation and system requirement.. The various levels of autonomy and the different IP protection grades meet the needs of every environment whilst the flexibility of the

accessories permit every type of installation. For further details and the complete list of items relating to lighting and emergency signaling, please consult the dedicated catalogue.

^{*}Harper series lamps use the connection with the loop for data exchange only and not for their power supply, therefore, in addition to the connection to the loop a connection to the electrical network is required for each lamp.



Code guide

| | DV | DIVA |
|-----------------------|-------|-----------------|
| | DX | DEXIA |
| | HP100 | Harper 100 |
| Product name | HP200 | Harper 200 |
| | HP320 | Harper 320 |
| | HP330 | Harper 330 |
| | SP | SPOTLED |
| | S | Standard |
| to act on the | А | Self-test |
| version" | В | BUS Supervised |
| | L | Central-battery |
| Maintained (M) – | E | Non-Maintained |
| lon-maintained (NM)** | А | Maintained |
| | 08 | W |
| | 11 | W |
| ower | 18 | W |
| | 24 | W |
| n-maintained (NM)** | 36 | W |
| | 01 | 1 hour |
| | 15 | 1.5 hours |
| | 02 | 2 hours |
| h | 03 | 3 hours |
| ouration | 04 | 4 hours |
| | 05 | 5 hours |
| | 06 | 6 hours |
| | 07 | 7 hours |
| | 40 | IP40 |
| P Protection grade | 42 | IP42 |
| | 65 | IP65 |

Product code example: HP100BA240140

NOTE
*The only versions that can be connected to the control panel Loop are the 'B: BUS Supervision' versions.
**The only versions that can be switched on by the control panel, also during NON-emergency conditions (mains present) are the Permanent (BA) versions.

EMERGENCY LIGHTING HARPER

Diva

Lamps



LED emergency lamps with a compact minimalist design.



| Product type | Emergency lighting device |
|-----------------------------|---|
| Versions | Standard, Self-Test, BUS Supervised, Central-Battery |
| Туре | Maintained (M) — Non-maintained (NM) |
| Installation | Wall, Ceiling |
| Power supply voltage | 220/230Vac, 50-60Hz |
| Battery | LiFePO₄ 3,2V |
| Isolation class | II II |
| Colour | RAL9003 White |
| Light source | LED |
| Colour temperature | 6000K |
| Diffuser | Ultrasound-welded polycarbonate |
| A delite and the control of | Dedicated terminal for inhibition function |
| Additional information | Dedicated terminal for rest mode function |
| IP protection rating | IP42, IP65 (*) |
| IK Protection rating | IK07 |
| Operating temperature | From 0° to 40°C |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 |
| Dimensions | 230x100x22,5 mm |

^(*) The IP65 grade is obtained with an accessories kit.

ORDER CODES

| p/n | Power (3) | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non-maintained (NM) | | MED. FLUX [Im] M | Recharge |
|------------|-----------|----------|---|--|-----|------------------|----------|
| DVBA080342 | 8W | 3h | 1.5 | N/M-M | 130 | 130 | 6h |
| DVBA110242 | 11W | 2h | 1.5 | N/M-M | 180 | 180 | 6h |
| DVBA110342 | 11W | 3h | 2 x 1.5 | N/M-M | 180 | 180 | 12h |
| DVBA180142 | 18W | 1h | 1.5 | N/M-M | 320 | 180 | 6h |
| DVBA180242 | 18W | 2h | 2 x 1.5 | N/M-M | 320 | 180 | 12h |
| DVBA241542 | 24W | 1.5h | 2 x 1.5 | N/M-M | 400 | 220 | 12h |

Accessory items

OHDVIP65

IP65 Kit



INICOM

Remote control for management of rest mode



OHDVPTK

Pictograms kit for DIVA



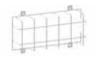
OHX00BR45

Bracket for installation with a 45° inclination



OHX00GRT

Protective metal grating for complete protection of the lamp body



OHBBK

Kit for fixing on electrified bar



Dexia

illumination



 $\label{thm:limit} \mbox{High-flux LED emergency lamp designed for industrial environments, department stores and car parks.}$



| Product type | Emergency lighting device |
|------------------------|---|
| Versions | Standard, Self-Test, BUS Supervised, Central-Battery |
| Туре | Maintained (M) – Non-maintained (NM) |
| Installation | Wall, ceiling, surface/false ceiling mount |
| Power supply | 220/230Vac, 50-60Hz |
| Battery | LiFePO ₄ 3,2V |
| Isolation class | II. |
| Colour | RAL9003 White |
| Light source | LED |
| Colour temperature | 6000K |
| Diffuser | Ultrasound-welded polycarbonate |
| Additional information | Dedicated terminal for inhibition function |
| Additional information | Dedicated terminal for rest mode function |
| IP protection rating | IP42, IP65 (*) |
| IK Protection rating | IK07 |
| Operating temperature | From 0° to 40°C |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 |
| Dimensions | 322x140x50 mm |

Emergency lighting

EMERGENCY LIGHTING HARPER

ORDER CODES

| p/n | Power | Duration | LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non-maintained (NM) | MED. FLUX [Im] N/M | MED. FLUX [lm] M | Recharge |
|------------|-------|---------------|----------------------------------|--|--------------------|------------------|----------|
| DXBA360142 | 36W | 1h-1,5h-2h-3h | 2 x 3.3 | N/M-M | 1300-1000-840-640 | 1000 | 12h |
| DXBA240142 | 24W | 1h-1,5h-2h-3h | 3.3 | N/M-M | 700-550-450-350 | 550 | 12h |

Accessory items

OHDXIP65

IP65 Kit



OHX00BR45

Bracket for installation with a 45° inclination



OHDXPTK

Pictograms kit for DEXIA



OHX00GRT

Protective metal grating for complete protection of the lamp body



OH200BRI

Flush-mount box



INICOM

Remote control for management of rest mode



OHX00FCK

Plasterboard and false ceiling fastening kit



OHBBK

Kit for fixing on electrified bar





HP100

Illumination



Neat, compact easy to install emergency reliability over time. lamps. The use of new generation LED technology with exclusive patented optics guarantees high light flow and



| Product type | Emergency lighting device | | | |
|------------------------|--|--|--|--|
| Versions | Standard, Self-Test, BUS Supervised, Central-Battery | | | |
| Туре | Maintained (M) – Non-maintained (NM) | | | |
| Installation | Wall, ceiling, surface/false ceiling mount | | | |
| Power supply | 220/230Vac, 50-60Hz | | | |
| Battery | LiFePO ₄ 3,2V | | | |
| Isolation class | | | | |
| Colour | RAL9003 White | | | |
| Light source | LED | | | |
| Colour temperature | 6000K | | | |
| | Dedicated terminal for inhibition function | | | |
| Additional information | Dedicated terminal for rest mode function | | | |
| | Test button and brightness dimmer | | | |
| IP protection rating | IP40, IP65 | | | |
| IK Protection rating | IK07 | | | |
| Operating temperature | From 0° to 50°C | | | |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 | | | |
| Dimensions | 255x122x38 mm | | | |

ORDER CODES

| p/n | Power | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) - Non-maintained (NM) | MED. FLUX [Im] N/M | MED. FLUX [lm] M | IP Protection grade | Recharge |
|---------------|-------|----------|--|--|-----------------------|---------------------|---------------------|----------|
| HP100BE110140 | 11W | 1h-1,5h | 1.5 | N/M | 130-95 | | IP40 | 6h |
| HP100BE240140 | 24W | 1h | 1.5 | N/M | 250 | = | IP40 | 6h |
| HP100BE110340 | 11VV | 3h-4h | 3.3 | N/M | 130-95 | = | IP40 | 12h |
| HP100BE240340 | 24W | 3h | 3.3 | N/M | 250 | = | IP40 | 12h |
| HP100BA110140 | 11W | 1h-1,5h | 1.5 | N/M-M | 130-95 | 60 | IP40 | 6h |
| HP100BA240140 | 24W | 1h | 1.5 | N/M-M | 250 | 120 | IP40 | 6h |
| HP100BA110340 | 11VV | 3h-4h | 3.3 | N/M-M | 130-95 | 60 | IP40 | 12h |
| HP100BA240340 | 24W | 3h | 3.3 | N/M-M | 250 | 120 | IP40 | 12h |
| HP100BE110165 | 11VV | 1h-1,5h | 1.5 | N/M | 130-95 | - | IP65 | 6h |
| HP100BE240165 | 24W | 1h | 1.5 | N/M | 250 | - | IP65 | 6h |
| HP100BE110365 | 11W | 3h-4h | 3.3 | N/M | 130-95 | - | IP65 | 12h |
| HP100BE240365 | 24W | 3h | 3.3 | N/M | 250 | - | IP65 | 12h |
| HP100BA110165 | 11W | 1h-1,5h | 1.5 | N/M-M | 130-95 | 60 | IP65 | 6h |
| HP100BA240165 | 24W | 1h | 1.5 | N/M-M | 250 | 120 | IP65 | 6h |
| HP100BA110365 | 11W | 3h-4h | 3.3 | N/M-M | 130-95 | 60 | IP65 | 12h |
| HP100BA240365 | 24W | 3h | 3.3 | N/M-M | 250 | 120 | IP65 | 12h |

EMERGENCY LIGHTING HARPER



HP200

Illumination



Neat, compact easy to install emergency lamps. The use of new generation LED technology with exclusive patented optics guarantees high light flow and reliability over time.



| Product type | Emergency lighting device |
|------------------------|---|
| Versions | Standard, Self-Test, BUS Supervised, Central-Battery |
| Туре | Maintained (M) – Non-maintained (NM) |
| Installation | Wall, ceiling, surface/false ceiling mount |
| Power supply | 220/230Vac, 50-60Hz |
| Battery | LiFePO4 3,2V |
| Isolation class | II II |
| Colour | RAL9003 White |
| Light source | LED |
| Colour temperature | 6000K |
| | Dedicated terminal for inhibition function |
| Additional information | Dedicated terminal for rest mode function |
| | Test button and brightness dimmer |
| IP protection rating | IP42, IP65 |
| IK Protection rating | IK07 |
| Operating temperature | From 0° to 50°C |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-22, EN 60598-2-2, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 |
| Dimensions | 319x137x38 mm |

ORDER CODES

| p/n | Power | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non-maintained (NM) | MED. FLUX [Im] N/M | MED. FLUX [lm] M | IP Protection grade | Recharge |
|---------------|-------|----------|--|--|-----------------------|---------------------|---------------------|----------|
| HP200BE180142 | 18W | 1h-1,5h | 1.5 | N/M | 180-135 | = | IP42 | 6h |
| HP200BE360142 | 36W | 1h-1,5h | 3.3 | N/M | 360-270 | - | IP42 | 12h |
| HP200BE180342 | 18W | 3h-4h | 3.3 | N/M | 180-135 | - | IP42 | 12h |
| HP200BE360342 | 36W | 3h-4h | 2 x 3.3 | N/M | 360-270 | - | IP42 | 24h |
| HP200BA180142 | 18W | 1h-1,5h | 1.5 | N/M-M | 180-135 | 80 | IP42 | 6h |
| HP200BA360142 | 36W | 1h-1,5h | 3.3 | N/M-M | 360-270 | 170 | IP42 | 12h |
| HP200BA180342 | 18W | 3h-4h | 3.3 | N/M-M | 180-135 | 80 | IP42 | 12h |
| HP200BA360342 | 36W | 3h-4h | 2 x 3.3 | N/M-M | 360-270 | 170 | IP42 | 24h |
| HP200BE180165 | 18W | 1h-1,5h | 1.5 | N/M | 180-135 | - | IP65 | 6h |
| HP200BE360165 | 36W | 1h-1,5h | 3.3 | N/M | 360-270 | - | IP65 | 12h |
| HP200BE180365 | 18W | 3h-4h | 3.3 | N/M | 180-135 | - | IP65 | 12h |
| HP200BE360365 | 36W | 3h-4h | 2 x 3.3 | N/M | 360-270 | - | IP65 | 24h |
| HP200BA180165 | 18W | 1h-1,5h | 1.5 | N/M-M | 180-135 | 80 | IP65 | 6h |
| HP200BA360165 | 36W | 1h-1,5h | 3.3 | N/M-M | 360-270 | 170 | IP65 | 12h |
| HP200BA180365 | 18W | 3h-4h | 3.3 | N/M-M | 180-135 | 80 | IP65 | 12h |
| HP200BA360365 | 36W | 3h-4h | 2x3.3 | N/M-M | 360-270 | 170 | IP65 | 24h |



HP100 and HP200 accessories

OH100BRI

Flush-mount box for HP100

OH200BRI

Flush-mount box for HP200



OHX00FCK

Plasterboard and false ceiling fastening kit



OH100PTDW

Pictogram for HP100 OH200PTDW

Pictogram for HP200 indicating down



OHX00BR45

Bracket for installation with a 45° inclination



OH100PTRG

Pictogram for HP100

OH200PTRG

Pictogram for HP200 indicating right



OHX00GRT

Protective metal grating for complete protection of the lamp body



OH100PTLF

Pictogram for HP100

OH200PTLF

Pictogram for HP200 indicating left



INICOM

Remote control for management of rest mode



OHBBK

Kit for fixing on electrified bar



Emergency lighting

EMERGENCY LIGHTING HARPER

SPOTLED

Emergency spotlight



Flush mounting emergency spotlight with ultra-slim design and high performance light. It is equipped as standard with a symmetrical and asymmetrical lens.



| Product type | Emergency lighting device | | | | |
|------------------------|---|--|--|--|--|
| Versions | Standard, Self-Test, BUS Supervised, Central-Battery | | | | |
| Туре | Maintained (M) – Non-maintained (NM) | | | | |
| Installation | False ceiling mount | | | | |
| Power supply voltage | 220/230Vac, 50/60 Hz | | | | |
| Battery | LiFePO ₄ 3,2V | | | | |
| Isolation class | II . | | | | |
| Colour | RAL9003 White | | | | |
| Light source | LED | | | | |
| Colour temperature | 5700K | | | | |
| Additional information | Dedicated terminal for inhibition function | | | | |
| | Dedicated terminal for rest mode function | | | | |
| IP protection rating | IP40 | | | | |
| IK Protection rating | IK07 | | | | |
| Operating temperature | From 0° to 40°C | | | | |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-2, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 | | | | |
| Diameter | 90 | | | | |
| | | | | | |

ORDER CODES

| p/n | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non-maintained (NM) | MED. FLUX [Im] N/M | MED. FLUX [Im] M | Recharge |
|------------|----------|--|---|--------------------|------------------|----------|
| SPBA240140 | 1h | 1.5 | N/M-M | 300 | 220 | 6h |
| SPBA240340 | 3h | 2 x 1.5 | N/M-M | 300 | 220 | 12h |

Accessory items

INICOM

Remote control for management of rest mode



CONVERTLED

Emergency lighting kit



Electrical power supply for emergency ceiling lights and LED modules. Compatible with all drivers with 6Vdc to 60Vdc output voltage, 2A max. current. Compatible with 6Vdc to 60Vdc LED modules.



| Product type | Emergency lighting kit | | | | |
|------------------------|---|--|--|--|--|
| Versions | Standard, Self-Test, BUS Supervised | | | | |
| Туре | Maintained (M) with commercial driver – Non-maintained (NM) | | | | |
| Installation | False ceiling / Inside the ceiling light | | | | |
| Power supply voltage | 220/230Vac, 50/60 Hz | | | | |
| Output voltage | Self-converting from 6V to 60V | | | | |
| Battery | LiFePO ₄ 3,2V | | | | |
| Isolation class | | | | | |
| Colour | RAL9003 White | | | | |
| Additional information | Dedicated terminal for inhibition function | | | | |
| | Dedicated terminal for rest mode function | | | | |
| IP protection rating | IP30 | | | | |
| IK Protection rating | IK07 | | | | |
| Operating temperature | From 0° to 40°C | | | | |
| Compliant with norms | EN 55015, EN 60598-1, EN 60598-2-2, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471 | | | | |
| Dimensions (W x H x D) | 240,2x65x26 mm | | | | |
| Warranty | 5 years | | | | |
| Package contents | packs of 25 | | | | |

ORDER CODES

| p/n | Output power | Duration | Battery LiFePO4 3.2V [Ah] | Recharge |
|--------|---------------------|---------------------|------------------------------|----------|
| CNBA01 | 4W - 3W - 2W - 1,5W | 1h - 1,5h - 2h - 3h | 2 x 1.5 | 12h |

Accessory items

OHCNTB Test button



INICOM

Remote control for management of rest mode





HP320

Signalling





Signalling lamps for escape routes, compact and flexible. It can be installed in any position by means of a bracket (supplied), for visibility at 20 meters and pictograms compliant with the international standard (ISO7010).

| Product type | Signalling device | | | | |
|------------------------|--|--|--|--|--|
| Versions | Self-Test, BUS Supervised, Central-Battery | | | | |
| Туре | Maintained | | | | |
| Installation | Wall, flag, ceiling, recess, suspended | | | | |
| Power supply voltage | 220/230Vac, 50-60Hz | | | | |
| Battery | LiFePO ₄ 3,2V | | | | |
| Visibility distance | 20m | | | | |
| Isolation class | II | | | | |
| Colour | RAL9003 White | | | | |
| Light source | LED | | | | |
| Colour temperature | 6000K | | | | |
| | Dedicated terminal for inhibition function | | | | |
| Additional information | Dedicated terminal for rest mode function | | | | |
| | Test button and brightness dimmer | | | | |
| IP protection rating | IP40 | | | | |
| IK Protection rating | IK07 | | | | |
| Operating temperature | From 0° to 50°C | | | | |
| Compliant with manner | EN 60598-1, EN 60598-2-22, EN 62471 | | | | |
| Compliant with norms | EN 1838, ISO 3864-4, ISO 7010 | | | | |
| Dimensions | 217x176,5x41 mm | | | | |
| | | | | | |

ORDER CODES

| p/n | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non- maintained (NM) | IP Protection grade | Recharge |
|---------------|----------|--|--|---------------------|----------|
| HP320BA000340 | 3h | 1.5 | SA | IP40 | 6h |



Accessory items

OH320FCK

Kit for recessed installation on a false ceiling leaving only the signalling panel visible



OH3X0SPK

Kit for suspension installation



OH3X0GRT

Protective metal grating for complete protection of the lamp body



OH320PNDW

PMMA panel with pictograms indicating down



OH320PNRL

PMMA panel with pictograms indicating left/right



INICOM

Remote control for management of rest mode



EMERGENCY LIGHTING HARPER



HP330

Signalling





Safety lamps for escape route signalling, compact and versatile, installable in any position via a single bracket, 30m visibility distance, international standard compliant restoral (ISO7010).

| Product type | Signalling device | | | | |
|------------------------|--|--|--|--|--|
| Versions | Self-Test, BUS Supervised, Central-Battery | | | | |
| Туре | Maintained | | | | |
| Installation | Wall, flag, ceiling, recess, suspended | | | | |
| Power supply voltage | 220/230Vac, 50-60Hz | | | | |
| Battery | LiFePO ₄ 3,2V | | | | |
| Visibility distance | 30 m | | | | |
| Isolation class | II. | | | | |
| Colour | RAL9003 White | | | | |
| Light source | LED | | | | |
| Colour temperature | 6000K | | | | |
| | Dedicated terminal for inhibition function | | | | |
| Additional information | Dedicated terminal for rest mode function | | | | |
| | Test button and brightness dimmer | | | | |
| IP protection rating | IP40 | | | | |
| IK Protection rating | IK07 | | | | |
| Operating temperature | From 0° to 50°C | | | | |
| Constitute the const | EN 60598-1, EN 60598-2-22, EN 62471 | | | | |
| Compliant with norms | EN 1838, ISO 3864-4, ISO 7010 | | | | |
| Dimensions | 322x231,5x41 mm | | | | |



ORDER CODES

| p/n | Duration | Battery LiFePO ₄ 3.2V [Ah] | Maintained (M) – Non- maintained (NM) | IP Protection grade | Recharge |
|---------------|----------|--|--|---------------------|----------|
| HP330BA000140 | 1 h | 1.5 | SA | IP40 | 6h |
| HP330BA000340 | 3h | 3.3 | SA | IP40 | 12h |

Accessory items

OH330FCK

Kit for recessed installation on a false ceiling leaving only the signalling panel visible



OH3X0SPK

Kit for suspension installation



OH3X0GRT

Protective metal grating for complete protection of the lamp body



OH330PNDW

PMMA panel with pictograms indicating down



OH330PNRL

PMMA panel with pictograms indicating left/right



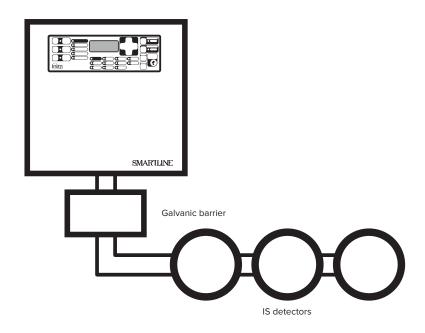
INICOM

Remote control for management of rest mode





Conventional detectors and accessory items Atex Certified



ORBIS I.S. (Intrinsically Safe) is a range of conventional detectors which have been especially designed and approved for use in inflammable atmospheres.

These products are certified BASEEFA (British Approval Service for Electrical Equipment in Flammable Atmospheres)

in compliance with BSEN60079-0:2004, IEC60079-0:2004, EN5002:2002, EN/BSEN/IEC60079-26:2004 Category II 1G Ex ia IIC T5 (T4 to Ta < 60°C).

The diagram illustrates the wiring method required for I.S. addressable detectors and the accessories to utilize.

ORB-OP-52027 – I.S. Conventional optical smoke detector, category II 1G Ex ia IIC T5 (T4 to Ta < 60°C) LPCB Cert. No. 010s

 $\mbox{ORB-OH-53027}$ – I.S. Conventional optical smoke/heat detector, category II 1G Ex ia IIC T5 (T4 to Ta < $60^{\circ}\mbox{C})$

ORB-HT-51145 - I.S. A1R Conventional heat detector (Rate-of-rise) category II 1G Ex ia IIC T5 (T4 to Ta < 60° C) LPCB Cert. No. 010r

ORB-HT-51151 – I.S. Conventional heat detector BS (Fixed threshold) category II 1G Ex ia IIC T5 (T4 to Ta < 60°C) LPCB Cert. No. 010r

ORB-MB-50018 - Mounting base for Orbis Intrinsically Safe conventional detectors

55100-031 – Intrinsically Safe Orbis call point for indoor application

55100-033 – Intrinsically Safe Orbis call point for outdoor application

29600-378 - Galvanic barrier for conventional detectors - DIN rail mount

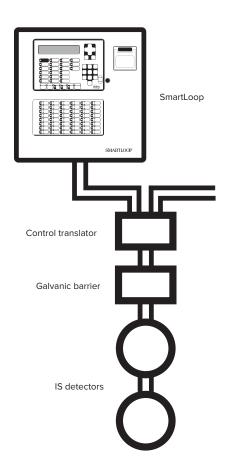






ATEX equipment and fire-extinguishing accessory devices

Addressable detectors and Apollo XP95 accessory items Atex Certified



XP95 IS (Intrinsically Safe) is a range of detectors which have been especially designed and certified for use in inflammable atmospheres. These products are certified BASEEFA (British Approval Service for Electrical Equipment in Flammable Atmospheres) in compliance with EN50014 and EN50020 and approved E Ex ia IIC T5 (T4 to Ta < 60° C). The diagram illustrates the wiring method required for I.S. addressable detectors and the accessories to utilize.

55000-640 – I.S. Addressable optical smoke detector – Approved E Ex ia IIC T5 (T4 to Ta < 60°C)

LPCB Cert. No. 010q

55000-440 – I.S. Addressable heat detector – Approved E Ex ia IIC T5 (T4 to Ta < 60°C) LPCB Cert. No. 010p

45681-215 – I.S. Mounting base for addressable detectors

55200-940 – I.S. Addressable call point –

Approved E Ex ia IIC T5 (T4 to Ta < 60° C)

55000-855 – Single channel protocol translator – DIN rail mount LPCB Cert. No. 010ag

55000-856 — Dual channel protocol translator — DIN rail mount LPCB Cert. No. 010ag

29600-098 – Galvanic barrier for analogue detectors – DIN rail mount





ATEX EQUIPMENT AND FIRE-EXTINGUISHING ACCESSORY DEVICES

Atex sounders

17-970328 — I.S. sounder is an audible signalling device for installation in explosive atmospheres — Category 1 (for zones type 0.1 and 2). — Approval ATEX — Ex II EEx ia IIC T4





| Tone | 49 selectable by means of a DIP Switch | |
|-----------------------|--|--|
| Sound output @ 1m | Up to 100 dB(A) (configurable) | |
| IP protection rating | IP65 | |
| Operating voltage | 6 – 28 Vdc | |
| Consumption | 25 mA | |
| Operating temperature | -40°C - +60°C | |
| Wire Entry | 2 x 20 mm on base | |
| Weight | 350 g | |
| Dimensions | 88.7 (diameter) x 100 (height) mm | |

17-970330 - I.S. Sounder/flasher suitable for installation in explosive atmospheres – Category 1 (for zones type 0.1 and 2) – Approval ATEX – Ex II EEx ia IIC T4





| Tone | 49 selectable by means of a DIP Switch |
|-----------------------|--|
| Sound output @ 1m | Up to 100 dB(A) (configurable) |
| IP protection rating | IP65 |
| Operating voltage | 6 – 28 Vdc |
| Consumption | 48 mA |
| Operating temperature | -40°C - +60°C |
| Wire Entry | 2 x 20mm on base |
| Weight | 350 g |
| Dimensions | 88.7 (diameter) x 85 (height) mm |
| | |

17-970362 — Zener Barrier for I.S. Sounders, DIN rail mount, capable of powering 2 sounders

17-970271 — High-powered sounder in flame-proof enclosure suitable for installation in explosive atmospheres — Category 2 (for zones type 1 and 2) — Approval ATEX — Ex II 2G EEx IIC T4





| Tone | 32 tones selectable by means of a DIP Switch | |
|-----------------------|--|--|
| Sound output @ 1m | 117 dB(A) (configurable) | |
| IP protection rating | IP67 | |
| Operating voltage | 24 Vdc | |
| Current draw | 265 mA | |
| Operating temperature | -50°C - +55°C | |
| Weight | 3.4 Kg | |
| Dimensions | 181 (diameter) x 262 (height) mm | |

TCB-0003 — Red flasher in explosion-proof enclosure for audible signalling in hazardous environments — Category 2 (for zones type 1 and 2) — Approval ATEX — Ex II 2G EEx IIC T4





| Light output | 5 J |
|-----------------------|----------------------------------|
| | |
| IP protection rating | IP67 |
| Operating voltage | 24 Vdc |
| Current draw | 300 mA |
| Operating temperature | -50°C - +40°C |
| Weight | 2.45 Kg |
| Dimensions | 153 (diameter) x 246 (height) mm |

17-970234 — Bell in flame-proof enclosure for audible signalling in explosive atmosphere - Category 2 (for zones type 1 and 2) — Approval ATEX — Ex II 2G EExd e IIC T6





| Sound output @ 1m | 105 dB(A) | |
|-----------------------|----------------------------------|--|
| IP protection rating | IP66 | |
| Operating voltage | 24 Vdc | |
| Current draw | 320 mA | |
| Operating temperature | -20°C - +40°C | |
| Weight | 3.5 Kg | |
| Dimensions | 200 (diameter) x 270 (length) mm | |

ATEX EQUIPMENT AND FIRE-EXTINGUISHING ACCESSORY DEVICES

Atex linear barrier

ARDEA Eex S-SF – Atex Smoke Beam detector

- Barrier TX - RX - Cat. 2GD-EXD IICT6 - From 5 to 100m





Accessory items

29600-131

Alluminium mounting base to fit PG16 glands for exposed pipes. Allows the detector base to be fitted in such a way that the rear of the detector

is sealed and fitted to the external pipes.

29600-139

Alluminium mounting base to fit M20 glands for exposed pipes. Allows the detector base to be fitted in such a way that the rear of the detector

is sealed and fitted to the external pipes.



29600-196

Plastic mounting base to fit PG16 glands for exposed pipes. Allows the detector base to be fitted in such a way that the rear of the detector

is sealed and fitted to the external pipes.

Fire suppression accessory items

SmartLetLoose/ONE

Addition of a SmartLetLoose/ONE fire suppression board to any SmartLine or SmartLight series fire control panel provides the system with GAS suppression control capabilities in compliancy with EN12094-1. SmartLetLoose/ONE enhanced control

panels provide all the functions required by the applicable normative and are capable of managing all devices required for fire extinction system management.



Call points in various colours













IC0020Y – Conventional call point in yellow

IC0020G - Conventional call point in green

IC0020B – Conventional call point in blue

IC0020W – Conventional call point in white

MCP3A-Y000SG-K013-65C* — Conventional call point in yellow enclosure with transparent guard MCP3A-B000SG-K013-66C* — Conventional call point in blue with transparent guard

ICB010Y – Call point in yellow

ICB010G – Call point in green

ICB010B – Call point in blue

ICB010W - Call point in white





Keyswitch, supplied without label

ICK010Y - Call point in yellow

ICK010G - Call point in green

ICK010B - Call point in blue

ICK010W - Call point in white



ISS022** - Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling and EN54-23 certified visual signalling Comes with 'Fire alarm' written on it, available with different indications on request.



| Sound output @ 1 m | 92 dB(A) |
|--------------------|---------------------|
| Light output | EN54-23 W 4,6 - 9,1 |
| Flash frequency | 1 Hz |

| Operating voltage | 11 – 30 Vdc |
|------------------------|---------------------|
| Consumption | 50 mA |
| Dimensions (w x h x d) | 293 x 130 x 75 mm |
| Operating temperature | from -10°C to +55°C |

ISS021** - Audible/Visual sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability, supplied with the wording 'Fire alarm.' Available with different alarm indications: 'Evacuate' and 'Extinction in progress,' to be ordered as an accessory item.



| Sound output @ 1 m | 92 dB(A) |
|--------------------|--------------|
| Operating voltage | 18 – 30 Vdc |
| Consumption | 21mA (media) |

| Dimensions (w x h x d) | 293 x 130 x 55 mm |
|------------------------|---------------------|
| Operating temperature | from -10°C to +55°C |

^{**}Refer to 'Accessory' section for available text.



SmartLevel

24V power supply station









SmartLevel series power stations are ideal for powering all the devices located in the area protected by the detection system. They meet all the requirements of the EN54 standard, constituting fully supervised and certified power supplies. They are equipped internally with the new switching module with resonant technology and internal CPU for reliable, efficient and secure power management. Two models are available:

- SPS24060G and SPS24160G (respectively 1.5A and 4A) with LCD command screen for viewing the events log or fault details (low battery, mains failure, dispersion to earth, etc.) and the current draw of each output; provides 3 individually protected outputs with 4A current limit, connectible to the RS485 BUS of the fire detection panel.
- SPS24060S and SPS24160S (respectively 1.5A and 4A) with status LEDs, fault output, mains fault output, single power output. Can be used as a stand-alone device or connected directly to the loop of an addressable control panel (Inim protocol). Thanks to its loop interface, it is recognized by the control panel as being a power station and therefore becomes completely and automatically supervised thus reporting all signals to the control panel.

The SPS24060x versions are capable of supplying up to 1.5A @ 27.6V and provide housing for two 12V -7Ah batteries; the SPS24160x versions are capable of supplying up to 4A @ 27V and provide housing for two 12V -17Ah batteries.

The power stations have an independent battery-charging circuit capable of charging the batteries without affecting the output current to the load, and a thermal probe that adapts the battery charge in accordance with their operating temperature. The battery efficiency is assessed by accurately measuring the internal resistance (with 0.1 ohm resolution) of the batteries in such a way as to signal any decrease in efficiency that might jeopardize the system functionality in the event of mains failure.

The CPU contained in the innovative Switching module is the core of the apparatus and is capable of supervising all of its parameters (internal temperature, current supplied, output voltage, battery parameters, dispersion to earth) and guarantees a product of the highest quality.

Main features

Input voltage: 230Vac +10% -15% 50/60 Hz

- Stability: higher than 1%
- 3 outputs, each one protected against short circuits and current limited to 4A (SPS24060G and SPS24160G version only)
- Graphic LCD, Buzzer, Current draw monitoring on each output, Events log for the last 50 events.(SPS24060G and SPS24160G version only)
- Directly connectible to the detection loop of the control panel (SPS24060S and SPS24160S versions only)
- Capable of connection to the RS485 BUS of the control panel for the supervision of the power supply station and control of the outputs (SPS24060G and SPS24160G versions only)
- Independent built-in battery charger with thermal probe for battery temperature measurement
- Batteries supervision
- Batteries disconnection in case of deep discharge
- Fault signalling relay output
- Detection of dispersion-to-earth fault
- Certified CPD EN54-4

SPS24060G

- LCD
- RS485 BUS connection
- Internal switching power-supply module 1.5A @ 27.6V
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm.
- Weight (without batteries): 3 Kg

SPS24160G

- LCD
- RS485 BUS connection
- Internal switching power-supply module 4A @ 27.6V
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 mm
- Weight (without batteries): 6 Kg

SPS24060S

- Connects to the detection loop
- Internal switching power-supply module 1.5A @ 27.6V
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm.
- Weight (without batteries): 3 Kg

SPS24160S

- Connects to the detection loop
- Internal switching power-supply module 4A @ 27.6V
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 mm.
- Weight (without batteries): 6 Kg











Power supply modules and boxed power supplies

Inim offers two switching power supply/battery charger units: the 1.5A model and the 4A model. Each model is available in a 'in-box' version. It consists of a switching power supply module housed in a metal cabinet where two batteries 12V can be housed too.

This solution is ideal for applications where supervision of all the power supply components is not essential. All models provide a thermal probe input. This device protects the batteries against overheating and successive damage by measuring the battery temperature and regulating the battery-charge voltage accordingly.

The switching module is based on a CPU that manages its own parameters (temperature, current, voltage), the battery charging operation (by means of an independent circuit) and supervises the batteries (voltage, internal resistance, etc.) and other parameters of the system (output current and voltage, dispersion to earth, etc.).



IPS24060G – 1.5A power supply module BPS24060G – 1.5A power supply module in enclosure

- CPU based power supply Input voltage: 230Vac ± 15%, 50Hz
- Mains absorption: 0.4AOutput voltage: 27.6Vdc
- Maximum current: 1.5Adc
- Stability: higher than 1%
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery charge adjustment in accordance with the battery temperature (ProbeTH thermal probe management).

- Metal enclosure
- Batteries disconnection in case of deep discharge
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

For the BPS24060G model:

- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm.
- Weight (without batteries): 3 Kg

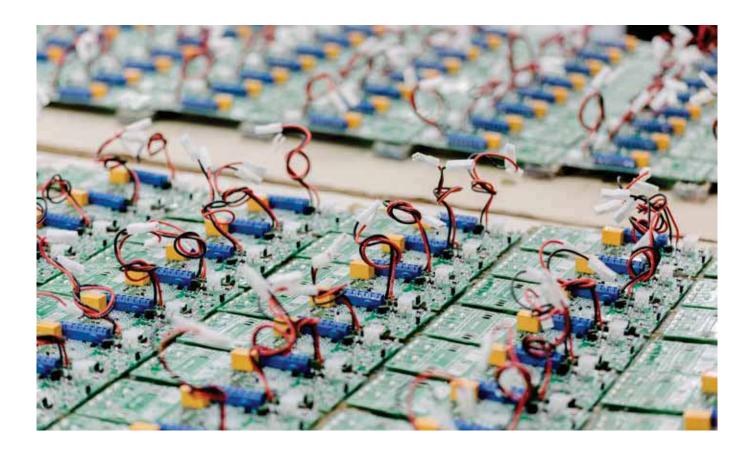
IPS24160G – 4A power supply module BPS24160G – 4A power supply module in enclosure

- CPU based power supply Input voltage: 230Vac ± 15%, 50Hz
- Mains absorption: 0.9A
- Output voltage: 27.6Vdc
- Maximum current: 4Adc.
- Stability: higher than 1%
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery charge adjustment in accordance with the battery temperature (ProbeTH thermal probe management).

- Metal enclosure
- Batteries disconnection in case of deep discharge
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

For the BPS24160G model:

- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 mm.
- Weight (without batteries): 6 Kg



ProbeTH

Attachment of the thermal probe (optional) to the control panel/power supply station allows the battery-charge voltage to be regulated in accordance with the battery temperature, this optimizes the charge voltage and results in longer battery life.



ORDER CODES

 $\textbf{SPS24060G} \ \ 24 \text{V}, 1.5 \text{A power supply station with LCD and RS485 connection capability}$

SPS24160G 24V, 4 A power supply station with LCD and RS485 connection capability

SPS24060S 24V, 1.5A power supply station with LED status indicators and Inim loop connection capability SPS24160S 24V, 4 A power supply station with LED status indicators and Inim loop connection capability

IPS24060G 1.5A power supply module IPS24160G 4A power supply module

BPS24060G 1.5A power supply module in enclosure **BPS24160G** 4A power supply module in enclosure

ProbeTH Thermal probe

Hold open electromagnets

Besides signalling the outbreak of fire, one of the main functions of automatic fire-detection systems is to restrict the fire by releasing fire doors normally held open by fire-door holding electromagnets.

This section describes a series of electromagnetic locks for holding fire doors open and releasing them in the event of fire, the different models adapt to various types of doors.

016301

Hold open fire door electromagnets with fixing base, power supply 24 Vdc pulling force 55 Kg., with base in zinc plated steel $\,$

and fixed counterplate with base in zinc plated steel.

| Power supply voltage | 24 Vdc |
|------------------------|----------------------|
| Current consumption | 65 mA |
| Holding force | >55Kg |
| Base dimensions | 65 x 65 x 3mm |
| Electromagnet diameter | Diameter 50mm x 39mm |

018301

Hold open fire door electromagnets with fixing base, power supply 24 Vdc pulling force 140

Kg., with base in zinc plated steel and fixed counterplate with base in zinc plated steel.



| Power supply voltage | 24 Vdc |
|----------------------|--------|
| Current consumption | 70 mA |
| Holding force | >140Kg |

| Base dimensions | 65 x 65 x 3mm |
|------------------------|----------------------|
| Electromagnet diameter | Diameter 70mm x 39mm |

19001

Hold open fire door electromagnets, power supply 24 Vdc pulling force 55 Kg., with door release button. Enclosure in black ABS. Supplied without

counterplate, to be purchased separately.



19002

Hold open fire door electromagnets, power supply 24 Vdc pulling force 55 Kg., with door release button. Enclosure in black anodized aluminium. Supplied

without counterplate, to be purchased separately.



| Power supply voltage | 24 Vdc |
|----------------------|--------|
| Current consumption | 60 mA |

| Holding force | >55Kg |
|-----------------|----------------|
| Base dimensions | 90 x 75 x 35mm |

18005

Hold open fire door electromagnets, with fixed floor mount, operating voltage 24Vdc, holding force 55 Kg., and with door release button. Body

in black or white painted aluminium [DR 18005B]. Supplied without counterplate (to be purchased separately).





| Power supply voltage | 24 Vdc |
|----------------------|--------|
| Current consumption | 60 mA |

| Holding force | >55Kg |
|-----------------|----------------|
| Base dimensions | 90 x 75 x 35mm |

01805Z

Swivel counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005

magnets.

Complessive Dimensions 65 x 65 x 54mm.



01800Z

Fixed counterplate with base in zinc plated steel for DR1901, DR1902 and DR1805 magnets.

Complessive Dimensions 65 x 65 x 28mm.



18101

Holding electromagnets for fire doors, operating voltage 24Vdc, holding force 140Kg, and with door release button. Body in black painted steel.

Supplied without counterplate (to be purchased separately).



| Power supply voltage | 24 Vdc |
|----------------------|--------|
| Current consumption | 70 mA |

| Holding force | >140Kg |
|-----------------|-----------------|
| Base dimensions | 100 x 90 x 43mm |

018157

Swivel counterplate with base in zinc plated steel for DR18101 electromagnets.

Complessive Dimensions 65 x 65 x 54 mm.



01810Z

for DR18101 electromagnets.

Fixed counterplate with base in zinc plated steel Complessive Dimensions 65 x 65 x 33 mm.



01740

Mounting telescopic bracket. Telescopic square-section bracket 40x40mm for horizontal wall or vertical floor mounting of holding electromagnets. Body in black painted steel.

180° swing door-retainer fixing plate. Length 140 mm (adjustable up to 200 mm).



ACCESSORY DEVICES

Ancillary devices

The products shown on this page are useful accessories for enhancing fire detection systems and their installation. Among these are plastic covers, adapters for external ducts, magnets

for checking the operating capacity of detectors, etc. Interface boards, battery-operated detector, useful for residential systems.

Interface boards

Smart485IN - Standardized interface board

Connects directly to the RS485 BUS of Inim control panels. The system processes the interface data in the same way as repeater data. This interface provides an input/output connector which receives/ transmits signals to/from standardized Fire Department control boxes.



REL1INT - Relay board

Converts supervised or open-collector outputs into a dry contacts. Operates at 12 or 24V (selected by means of a jumper). Provides 4

mounting locations, board dimensions 45x35



STD241201 - 24Vdc/12Vdc step-down switching converter

Voltage reducer from 24V to 14V, ideal for powering 12V devices (outdoor sounders, telephone communicators, etc.) from the fire

control panel. Based on switching technology, this highly efficient device produces low heat output. Maximum output current 1A.



Accessories items for detectors

EB0010 - Detector mounting base

Detector base for IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.



EB0020 - Relay base

The base is equipped with a relay activated by the detector.



EB0030 - Deep base

Mounting base for Enea and Iris detectors with pipe entry for exposed pipes, it provides 4

knock outs for 16mm pipes. To be installed under the detector base, h 34mm.



EB0040

Base protected against dripping water when tilted up to 15 degrees max.



EB0040H

2W heater for EB0040 bases.



EB0050

EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



EB0060*

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.



DD001

This is a cover for unused detectors: it attaches to Inim detector bases, restores line continuity and provides a discrete aesthetic semblance.

Ideal for those applications where bases are installed for the future addition of detectors.



*Not for EU market.

Various accessory items

IL0010

Remote indicator LED repeater that replicates the signal generated by a detector in alarm status.



S/KARI MR

LED repeater for ceiling or floor installation Super bright LED light. 3Vdc, 24V power supply Structure in polycarbonate transparent white. Light diffuser lens 'FIRE' sign in Red. IP42 Protection rating



IACPP10

IP54 enclosure for manual callpoints, suitable for indoor installations. It consists of a transparent polycarbonate enclosure that covers the call point and is sealed by gaskets which keep out dust,

grime and water. Access to the device is gained by simply lifting the cover.



IACPP20

Waterproof enclosure for manual call points, suitable for outdoor installation. It consists of a transparent polycarbonate enclosure that covers the call point and is sealed by gaskets which keep out dust, grime and water. Access to the device

is gained by simply lifting the cover. A batterypowered beeper activates automatically when the cover is lifted, in order to dissuade malicious alarms.



INDOCBOX

Metal document box with key for the safe keeping of fire-system documents and layout plans.



INLINEFMF

Flush mounting kit for SmartLine and SmartLight panels range. IT consists of two L shaped bracket

and a front panel metal made.



INPROTCP

Metal protection frame for manual call points.

CTS01

Sign in aluminum indicating the presence of a manual call point, 160x160 mm.



CTS02

Aluminum sign board indicating fire alarm sounder presence, 160x160 mm.

Text label for audible/visual signalling devices (ESS021 – ESS022 – ISS021 – ISS022)

FOP45 'FIRE ALARM' (box with 10 pieces)
FOP46 'DOOR ALARM' (box with 10 pieces)

FOP47 'SPEGNIMENTO IN CORSO' (box with 10 pieces)

FOP48 'EVACUARE IL LOCALE' (box with 10 pieces)
FOP49'ALLARME GAS' (box with 10 pieces)

FOP36 'FIRE DO NOT ENTER' (box with 10 pieces)

FOP37 'EXTINCION DISPARADA' (box with 10 pieces)

FOP38 'GAS DISCHARGE' (box with 10 pieces)

FOP39 'FUEGO' (box with 10 pieces)

FOP34 'PRESENZA ACETILENE' (box with 10 pieces)

FOP35 'CARENZA OSSIGENO' (box with 10 pieces)

Text label for audible/visual signalling device PLEXI_ES2000

PLEXI_ES2000#1DX: 'ALLARME INCENDIO' warning sign with indicating RIGHT

PLEXI_ES2000#1SX: 'ALLARME INCENDIO' warning sign with indicating LEFT

PLEXI_ES2000#2DX: 'FIRE ALARM' warning sign with indicating RIGHT

PLEXI_ES2000#2SX: 'FIRE ALARM' warning sign with indicating

PLEXI_ES2000#3DX: 'EVACUARE IL LOCALE' warning sign with indicating RIGHT

PLEXI_ES2000#3SX: 'EVACUARE IL LOCALE' warning sign with indicating LEFT

PLEXI_ES2000#4DX: 'SPEGNIMENTO IN CORSO' warning sign with indicating RIGHT

PLEXI_ES2000#4SX: 'SPEGNIMENTO IN CORSO' warning sign with indicating LEFT

PLEXI_ES2000#5DX: 'ALLARME GAS' warning sign with indicating RIGHT

PLEXI_ES2000#55X: 'ALLARME GAS' warning sign with indicating LEFT

ACCESSORY ITEMS

Detectors test

SOLO A10 – Tester aerosol for smoke detectors

Spray can containing aerosol for testing smoke detectors, a non-flammable product specifically designed to test the operation of the detectors without making them dirty or compromising their functionality. Thanks to its special formula,

it guarantees rapid activation and equally rapid cleaning of the chamber after activation, minimizing the time required for the detector test. 125 ml pack.



SOLO 330 - SOLO A10 aerosol dispenser

Houses SOLO A3 or SOLO A10 canisters (not included) and allows the delivery of the aerosol over the detector by simply exerting light pressure from the bottom upwards.

Combined with the telescopic extension shown below, it allows the testing of detectors positioned as high up as 9m.



SOLO200 - Detector removal/replacement tool

It allows you to hook the detector that is mounted to the ceiling and detach it from its base, this tool is indispensable for cleaning operations or replacement of detectors as it eliminates the need to climb ladders. Combined with the telescopic extension shown below, it allows the removal of detectors positioned as high up as 9m.



SOLO461 - Cordless heat detector tester

Battery operated device for testing heat detectors, it allows quick and efficient testing of the detector operating capacity.

Combined with the telescopic extension

shown below, it allows the testing of detectors positioned as high up as 9m.



Testifire 1001-101 – Kit for smoke and heat detectors

Test kit for smoke and heat detectors, one device for both technologies. The smoke stimulus comes in non-pressurized capsules thus avoids the inconvenience of carrying pressurized aerosols. The kit includes:

- n°1 TestFire 1000-001 appliance
- n°1 TS3-001 Smoke test capsule
- n°2 poles/battery
- n°1 fast charger



Testifire 6001-101 – Kit for smoke and heat detectors

The kit includes all the items mentioned in the 1001-101 kit plus:

- n°1 4.5m fibreglass telescopic pole
- $n^{\circ}1200-001$ tool for the removal of detectors from bases
- n°2 610-001 protective carrying bag



TS3-6PACK-001 – Replacement capsule for smoke

Testifire generates a non-toxic smoke stimulus from a capsule, sufficient for between 500 to 1000 tests.



SOLO365 - Smoke detector tester

New SOLO365 is a smoke detector tester kit based on a cartridge for aerosol generator and no longer need spray can. Powered by internal Lithium Ion Battery Pack.

The Solo 365-001 Electronic Smoke Detector

Tester kit contains:

- SOLO 356 Head Unit x 1;
- SOLO 370 Lithium Ion Battery Pack x 1;
- SOLO 371 Smoke Generator x 1;
- SOLO ES3 Smoke Cartridge x 1;

E63-12PACK-001 - SOLO365 Smoke Cartridge

For use with SOLO365 Electronic Smoke Detector Tester. Supplied in Packs of 12.

SmokeSabre - Smoke test aerosol with hand held telescopic pole

Spray can for smoke detector test, suitable for hand held use, include a telescopic dispenser

for better smoke flow direction.

SOLO100 - Telescopic pole: 4.5m

Extends from 1.26m to 4.5 m by means of 4 easy-lock telescopic sections. It can reach detectors installed up to a height of 6m and can

be further extended by attaching a maximum of 3 SOLO 101 poles to reach detectors installed as high up as 9m.

SOLO101 - 1.13 m single pole

Reaches detectors installed at a height of 2.5m.

SOLO108 - - Telescopic pole: 2.5 m

Extends from 1.26m to 2.5 m by means of 2 easy-lock telescopic sections. Reaches detectors installed up to a height of 4 m. It can

be combined with an additional SOLO 101 pole in order to reach detectors installed higher.

Connection cables

LINK232F9F9 - Serial cable

RS232 connection cable between a PC and Inim control panels.

LINKUSBAB - USB cable

 $\label{thm:connection} \mbox{USB connection cable between a PC and SmartLoop control panels.}$

LINKUSB232CONV - Cable with RS232 - USB conversion adapter

RS232 - USB connection cable between PC and Inim control panels.

Probe-TH – Thermal probe

Thermal probe for battery charge optimization.











SOFTWARE

SmartLook

Supervisory software









SmartLook is a software package for the centralized supervision and management of INIM's fire detection and intrusion control systems. It offers a vast application spectrum. Its modularity makes it ideal for industrial, commercial and even small residential applications. A typical application is the centralized supervision of several installations located in different buildings or even different places. SmartLook also finds its niche in hotel receptions, congress centres, shopping malls, etc., for the monitoring of the security system status and interaction with it Thanks to its modularity, SmartLook is perfectly at ease in both small and large applications. The flexibility of the system allows it to supervise analogue addressable control panels from the Previdia and SmartLoop series as well as conventional panels from the SmartLine series. The true potential of SmartLook can be seen when it is applied to the management of data coming from installations which are geographically apart from each other thus centralizing the management of a distributed system in a single workstation. The SmartLook software, thanks to its user-friendly interface, also plays an important role in home automation when it is applied to the management of a SmartLiving intrusion-control panel. The latter can be managed in the same installation as fire detection panels from the Previdia, SmartLoop and SmartLine series.

SmartLook is a monitoring software based on graphic maps. The graphic maps are linked together in a tree structure. Each map accepts an arbitrary number of objects. An object can be a supervised element (detector, partition, zone, output, etc.), a connection to another map, a connection to a web page (VCR web interface) or a command button, possibly, with controlled access. The operator can interact with the system in real-time. IN this way it is possible to control the status of the of detectors, carry out operations such as reset, bypass, ion activation of outputs, etc. The SmartLook software integrates video capabilities that consent to the integration of cameras and DVRs with IP network web interfaces. IThe SmartLook software is capable of importing the system configuration by reading it directly on the control panel, or importing it from the database of the SmartLeague and PrevidiaLeague software thus reducing programming time considerably. The system provides uncomplicated self-diagnosis functions which allow the operator to verify the status of communication between the software and control panels. It is also capable of managing different access levels. The SmartLook software comprises two separate applications. One which allows the installer to configure the system and the other, dedicated to the user, which provides all the necessary supervisory functions.

ORDER CODES

SmartLook/F01L

'Lite' Fire Licence – Licence for the management of one Previdia, SmartLoop or SmartLine fire-detection control panel. Non-expandable licence.

SmartLook/F01E SmartLook/F02E SmartLook/F05E SmartLook/F10E SmartLook/I01L SmartLook/I01E SmartLook/I02E SmartLook/I05E SmartLook/I105E

Licence for the management of one Previdia, SmartLoop or SmartLine fire-detection control panel. Expandable licence.

Licence for the management of two Previdia, SmartLoop or SmartLine fire-detection control panels. Expandable licence.

Licence for the management of five Previdia, SmartLoop or SmartLine fire-detection control panels. Expandable licence.

Licence for the management of ten Previdia, SmartLoop or SmartLine fire-detection control panels. Expandable licence.

'Lite' Intrusion Licence - Licence for the management of one SmartLiving intrusion-control panel. Non-expandable licence.

Licence for the management of one intrusion-control panel from the SmartLiving series. Expandable licence.

Licence for the management of two intrusion-control panel from the SmartLiving series. Expandable licence. Licence for the management of five intrusion-control panel from the SmartLiving series. Expandable licence. Licence for the management of ten intrusion-control panel from the SmartLiving series. Expandable licence.

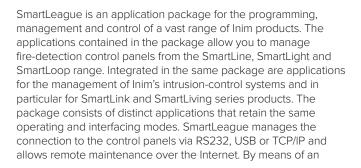
Control panel configuration software

The development team at Inim, driven by the awareness of the increasingly important role played by PC software in today's fire detection systems, set out with one goal in mind: to create software that simplifies programming and diagnostics. In fact,

programming greatly benefits from the use of the interactive capabilities and outstanding clarity that PC software can offer.

SmartLeague

Programming and management software for SmartLine, SmartLight e SmartLoop control panels





intuitive and functional graphical interface, SmartLeague offers truly innovative diagnostic functions. It allows you to interact directly with the control panel in order to detect wiring faults; update the configuration of devices connected to the loop; modify the addresses and also display the operating parameters. In addition, the SmartLeague software provides system status monitoring functions for real-time viewing, on high-performance graphic screens, of the status of the devices connected to the Loops, the status of the zones, the status of the timers, etc. This software can be downloaded for free by signing in and registering at www.inim.biz

Previdia/STUDIO

Programming and control software for Previdia control panels

The Previdia/STUDIO configuration and management software is an indispensable tool for system commissioning and maintenance. Simple and intuitive, it allows you to quickly and effectively adjust the operating parameters of each single element of the system, define the activation logic and configure the various components of the installation. Capable of operating both at individual control panel and network level, it makes use of a graphic interface designed to be used also on touch screen devices. The software is completed with effective diagnostic functions that allow accurate fault searches and the adjustment of the various intervention thresholds. Equally as effective



are the reporting functions which allow, starting from the data automatically collected by the control panel, the creation of complete reports in compliance with current legislation. The software also manages a database that can collect and store the data of each completed installation including, for each customer, reports of all maintenance and tests carried out on the system. The Previdia/STUDIO software is capable of connecting to the system via RS232, USB or TCP/IP connection, runs in Windows operating systems and can be downloaded free of charge by logging in and registering on website www.inim.biz.

F-COM/STUDIO

The 'F-COM/STUDIO' PC software can be obtained free of charge from the Inim Electronics website. This software will allow you to configure quickly and with ease all the parameters of the new



communicator as well as manage a database containing all the configurations of your customers.



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