GameOver

FIRE ALARM AND EXTINGUISHING SYSTEMS

GENERAL CATALOGUE

inim
ELECTRONICS

Fire.
The menace advances. What's the next move?
Play safe. Choose Inim.
Space protected. Danger eliminated.
Everything under control.

GAME OVER

Made in Inim. Made in Italy.

The energy of an Italian company in continuous evolution.
The innovation of intrusion, fire 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 that should surrounds us.
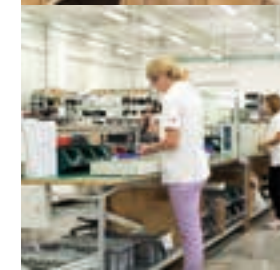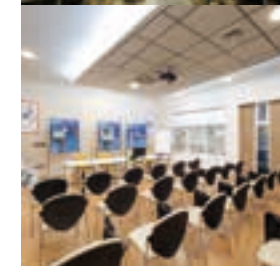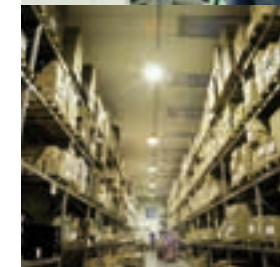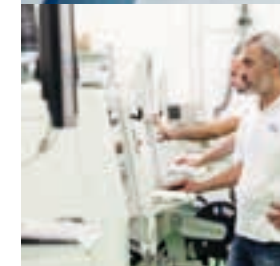
Technologies

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.

Emergency54

When an INIM system is combined with "Emergency54" technology, it is without doubt the maximum level of reliability installer companies can expect to find in a fire-detection system.
An "Emergency54" enhanced system is capable of activating fire alarm signaling even under the improbable conditions of a control panel CPU fault.
Emergency54 technology operates at panel level – to ensure signaling during a control panel CPU fault; and at network level – to ensure signaling during a main unit CPU fault. The Emergency54 also extends its functions to telephone communications. In fact, if the system is equipped with a SmartLoopPSTN board, it guarantees an emergency call in the event of an alarm during control panel CPU fault conditions.
The "Emergency54" enhancement technology is for those installer companies who wish to shape systems without compromise.

HorNet

The "HorNet" token-ring network is the ultimate in embedded RS485 supported systems. The highly fault-tolerant "HorNet" architecture is able to reconfigure itself in such a way as to protect the ring connectivity in the event of a network fault.
The real-time information exchange between control panels allows the system to activate the devices of one control panel in immediate response to an event on another. The HorNet" token-ring ensures that all the panels in the configuration are totally aware of "what-is-going-on" in the complete system of up to 30 control panels.

Janus

Janus technology is truly astounding. This technology is embedded in SmartLAN board. By accessorizing the control panel with a SmartLAN board, users will be allowed "no-risk" worldwide access to the system via Internet.
If the SmartLAN enhanced control panel is part of a HorNet token-ring, users will be able to interact with all the panels in the configuration, using the SmartLAN as the system gateway.
As well as providing easy remote access, the SmartLAN also offers the opportunity to send e-mail and UDP and TCP/IP data packets for system enquiry and programming purposes.

OpenLoop

OpenLoop technology is the outcome of the concerted efforts of the R & D professionals at INIM Electronics. This breakthrough technology allows INIM panels to accomodate different brands of peripheral devices by design. 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-run different brands of peripheral devices. It also supports all types of fire system devices (detectors, input modules, output modules, callpoints, sirens, etc.). The loops can be 2 or 4 wire configured (maximum wire length 2000m). INIM's OpenLoop technology also provides impressive self-diagnostic functions for loop anomaly detection. The outstanding management capacity of each loop allows the panel to manage an impressive 240 devices. The consistent performance and reliability of this advanced technology in "critical" high-noise conditions highlights its potential even more. Designed with the intent to go beyond the requirements of the related Directive standards, the loop and the entire spectrum of INIM's vast array of products ensure uncompromising levels of quality and performance.

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, 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.

SMARTLINE
CONVENTIONAL CONTROL PANELS

EN 54-2
EN 54-4
EN 12094-1

CPR

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLine

Conventional control panels with 2 zones or 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, especially those applications where fast installation and programming are among the most important aspects of the system. 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 tranquillity 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 frontplate. 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 power-supply 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 control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the display. The system can also be programmed by means of the SmartLeague software application. This intuitive programming software greatly simplifies the programming procedure. 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 with display and keypad for user operations.

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.

SmartLetLoose/ONE
Fire extinction board. Provides the system with GAS extinguisher control capabilities.
Approved CPD - EN12094-1.

SmartLevel
Power supply station connectable to the RS485 BUS (for supervision and management of the control panel power outputs). Refer to "Power supply stations".
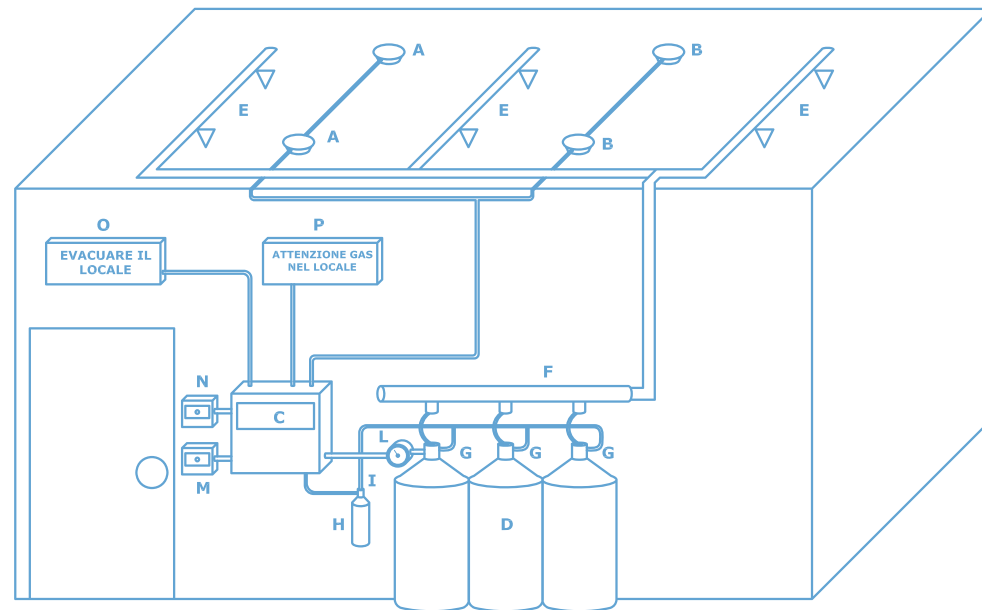
Features and Technical specifications

- Conventional fire-detection control panel.
- Available with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36
- Certified EN54 / EN54-2
- 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 output
- 1 ancillary power supply output
- 1 interruptible power supply output
- 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)
- Buzzer (provides audible signals)
- 8 Timers
- 8 logical equations
- Automatic balancing of individual detector lines
- RS232 connector for system programming from a PC
- Programming software
- Easy system programming from the control panel
- Access key for Level 2 functions (EN54 compliant)
- Thermal probe for battery optimization
- 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)
- Battery housing for two 7Ah - 12V batteries (for SmartLine020) or two 17Ah - 12V batteries (for SmartLine036)
- Dimensions (HxWxD for SmartLine020): 325x325x80mm - (HxWxD for SmartLine036): 497x380x87mm
- Weight (without batteries): SmartLine020= 3Kg; SmartLine036= 6Kg

SMARTLINE
CONVENTIONAL CONTROL PANELS

EN 54-2
EN 54-4
EN 12094-1

FIRE ALARM AND EXTINGUISHING SYSTEMS

Fire extinction

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLine series fire control panel provides the system with GAS extinguisher 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 detection system management (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: gas extinguisher cylinders.
E: gas release nozels
F: gas collectors.
G: pneumatic release valve.
H: pilot cylinder for gas release.
I: pilot cylinder electrovalve.
L: pressure switch.
M: manual activation button.
N: stop extinguisher gas button.
O: audio visual gas-release-imminent indicator.
P: audio visual gas-present indicator.

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 fire suppression system activation
- Supervised output for signaling activation (pre-extinguish)
- Supervised output for "Gas in area" signaling
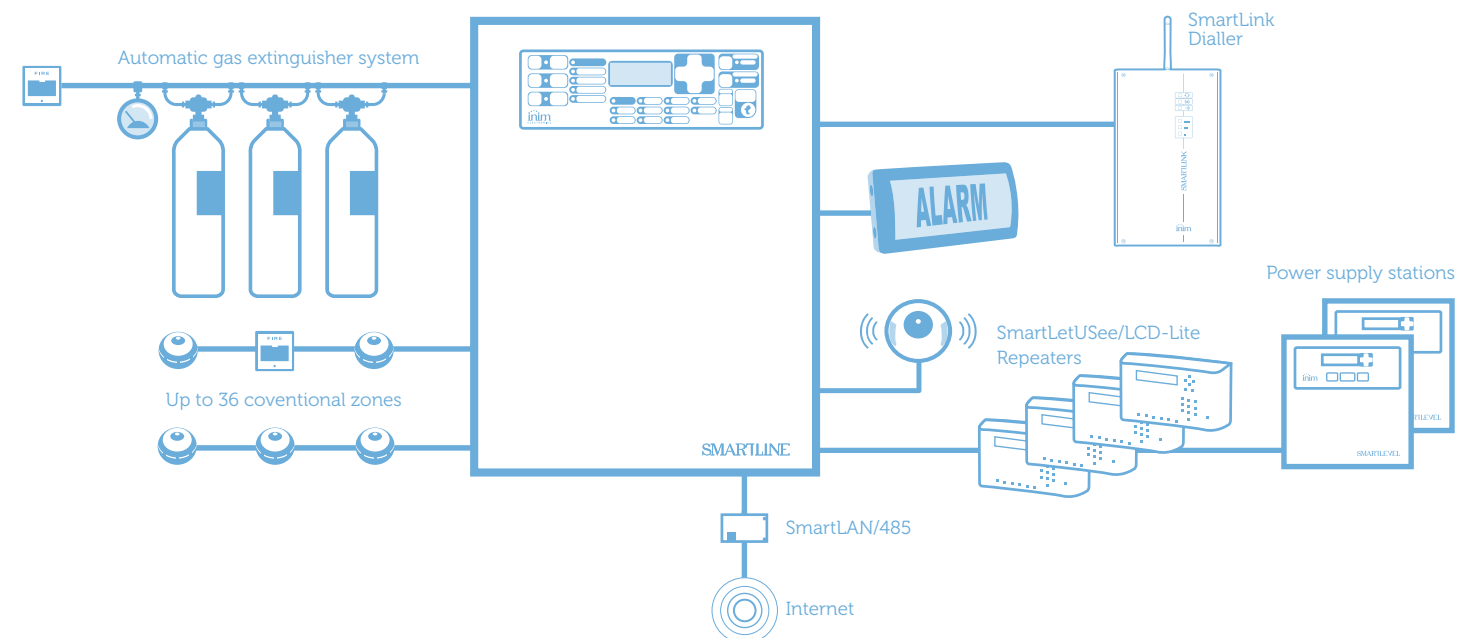
ORDER CODES

SmartLine020-2: non-expandable 2 zone conventional control panel.
SmartLine020-4: conventional control panel with 4 zones expandable to 20.
SmartLine036: conventional control panel with 4 zones expandable to 36.
SmartLine/8Z: 8 zone expansion board.
SmartLAN/485: ethernet connection board.
SmartLetLoose/ONE: fire suppression board.
SmartLetUSee/LCD-Lite: remote-control repeater panel for SmartLine and SmartLight control panels.
SmartLeague: programming and management software.
Link232F9F9: RS232 cable link between PC and INIM devices.
IPS24060G: switching power supply/battery charger 1.5A@27.6Vdc.
IPS24160G: switching power supply/battery charger 4A@27.6Vdc.
ProbeTH: thermal probe for optimized battery charge.

Programming software

The SmartLeague programming and management software is intuitive and simple to use. This indispensable tool allows security professionals to control INIM fire detection systems with ease. It allows fast and easy control panel configuration and offers an overall view of the system. It is also capable of providing detailed wiring diagrams of the system terminals in accordance with the configured settings.

Application diagram

Automatic gas extinguisher system

Up to 36 coventional zones

SmartLink Dialler

Power supply stations

SmartLetUSee/LCD-Lite Repeaters

SmartLAN/485

Internet

IRIS
CONVENTIONAL DETECTORS

EN 54-7
EN 54-5
EN 54-11

LPCB CPR

FIRE ALARM AND EXTINGUISHING SYSTEMS

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 unequalled 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.

Main Features
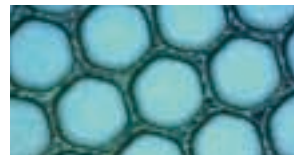
Insect screen

Smoke and temperature graph

- Newly designed optical chamber with sealed upper-part and 500 μm holes diameter mesh insect screen
- Bicolour LED: Red for alarm; Green slow flash for standby (optional) 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
- Sensitivity selection for smoke and heat (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 real-time values (by means of EDRV1000)
- Memory of the smoke and temperature levels 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

ID100 Optical smoke detector

LPCB CPR

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. The sensitivity can be configured to suit a wide range of applications (sensitivity configurable as: 0.08dB/m; 0.10dB/m; 0.12dB/m; 0.15dB/m).

ID200 Heat detector

LPCB CPR

The response characteristics of the ID200 heat detector have been carefully set in A1R mode (fixed threshold at 58°C with thermovelocimetric detection). However, it can be set (by means of EDRV1000 driver) to operate in B mode (fixed threshold at 72°C); in A2S mode (fixed threshold at 58°C); in BR mode (fixed threshold at 72°C with thermovelocimetric detection). As a result of such flexibility, this detector is useful in places where the environment is dusty or smoky and the risk of false alarms is high.

ID300 Smoke and Heat detector

LPCB CPR

The ID300 smoke and heat detector has new smoke and temperature sensing technologies. As a result, this improved –reliability detector responds well to all types of fires (especially to fast burning blazing fires involving inflammable liquids, which produce a limited amount of smoke) and is highly immune to false alarms. The ID300 can be set to the sensitivity mode which best suits the application (by means of EDRV1000 driver).

- 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 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. Given the reduced response, it is necessary to evaluate the risk factor before selecting this operating mode.
- SMOKE Mode: the detector will operate as per the ID100.
- HEAT Mode: the detector will operate as per the ID200.

Parameter	ID100	ID200	ID300
Operating voltage	10-30 Vdc		
Consumption during standby	90 uA	70 uA	90 uA
Consumption during alarm	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) ------------------------------------- Modalità AND – OR - PLUS
Operating temperature	-5°C + 40°C		
Height including base	46mm	54mm	
Diameter	110mm		
Weight (with base)	160g		
Weight (without base)	90g		

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

IRIS
CONVENTIONAL DETECTORS

EN 54-7
EN 54-5
EN 54-11
LPCB CPR

FIRE ALARM AND EXTINGUISHING SYSTEMS

EB0010 - Detector base
Detector base accommodates 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
elay base with a single relay which activates when the detector senses an alarm. The relay base allows you to interface the detector with intrusion control panels in domestic applications.

EB0030 - Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases, h 34 mm.

EB0040
Base protected against dripping water when tilted up to 15 degrees max.

EB0050
Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry

EB0060
Mounted base with integrate buzzer driven by "R" output.

IC0020 Manual callpoint

LPCB CPR

- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag and LED confirmation of activation.
- Selectable resistance.

Suitable to use with WCP0020 (transparent plastic screen against accidental activation) and FCP0020 (Plastic bracket for flush mounting, adaptable to UK single gang back box). DBCP0020 - Deep box for external pipe fitting (base h = 33mm; base + callpoint h = 57mm).

IC0010E Manual callpoint for door installation (IP67)

CPR DBI

Manual callpoint with resettable element. Weatherproof to IP67, suitable for outdoor installation.

IL0010 Remote indicator

Remote fire-warning indicator.

EITK1000-ToolKit
Configuration, maintenance and diagnostics system

Front view
of driver

Rear view
of driver

The EITK1000 kit comprises an EDRV1000 driver and FireGenius software.
The kit lets you to take full advantage of all the unique features of the Versa++ technology integrated into IRIS series conventional detectors. The EITK1000 allows you to configure each detector to suit its specific environment. It also permits you to connect directly to the detector line for a complete diagnosis of each device and thus test its operating capacity, verify its real-time values, read 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 read the smoke and temperature levels measured in the period prior to the last alarm detected.
The EDRV1000 driver (included in EITK1000 kit) is capable of operating autonomously by way of its internal battery, keypad and display. When the EDRV1000 driver is connected to a PC, it is powered through the USB port, in this way, it is possible to make full use of the FireGenius software application.
By means of an intuitive graphic interface, FireGenius allows you to interact with detectors, configure them, view their status and check the course of their real-time smoke/temperature levels.
The EITK1000 is the professional tool which will make your life a whole lot easier when it comes to system maintenance.
The EITK1000 comes with a 24Vdc power supply, essential cables and software application CD, all contained in a handy pouch.

Smoke and
temperature graph
on display

EITK1000
ToolKit

ORDER CODES

EITK100: kit for configuration, maintenance and diagnostics of systems with IRIS and ENEA series devices. The kit includes: EITK-DRV, EITK-BASE, EITK-PWSP.
EITK-DRV: driver for zones with IRIS series devices or loops with ENEA series devices.
EITK-BASE: base for IRIS and ENEA series detectors.
EITK-PWSP: power supply for the EITK-DRV driver.

SMARTLIGHT
ANALOG-ADDRESSABLE CONTROL PANELS

EN 54-2
EN54-4
EN 12094-1

CPR

FIRE ALARM AND EXTINGUISHING SYSTEMS

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, fault, monitor, early warning, 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 (deactivate) their outputs during predefined conditions.

Programming the system from the control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the graphic display. The system can also be configured from a PC using INIM's user-friendly software, the pre-set data can be downloaded via an RS232 serial connection. This method makes greatly speeds up the system configuration and startup phases.

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 or to the loop (for supervision and management of the control panel power-supply-station outputs. Refer to "Power-supply stations" section for details).
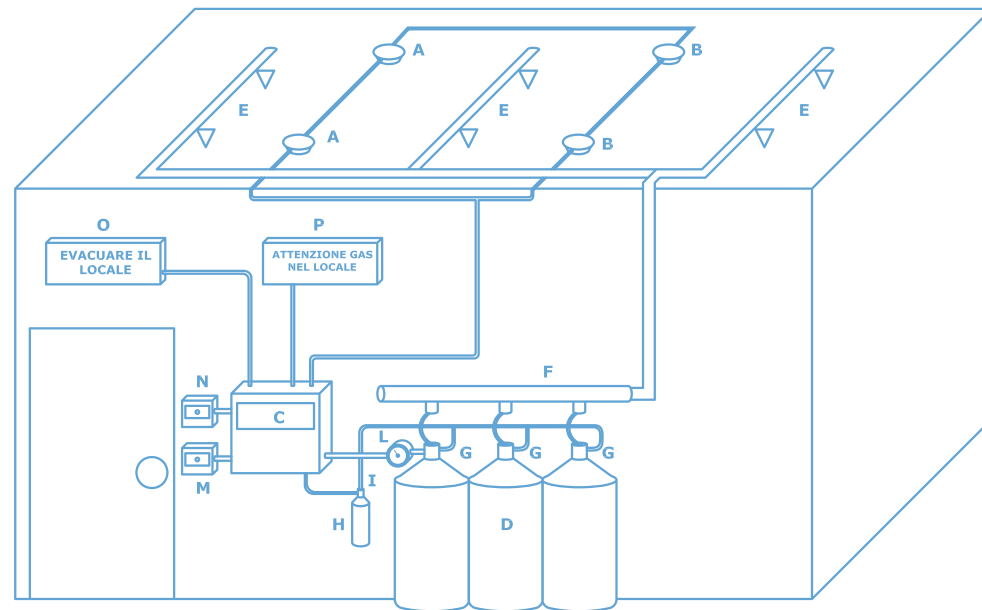
Features and Technical specifications

- Single-loop analogue-addressable control panel
- Certified EN54-2/EN54-4
- Certified EN12094-1 (Fire extinction)
- 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
- Buzzer (provides audible signals)
- 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): 325x325x80mm
- Weight (without batteries): 3Kg

SMARTLIGHT
ANALOG-ADDRESSABLE CONTROL PANELS

EN 54-2
EN54-4
EN 12094-1

FIRE ALARM AND EXTINGUISHING SYSTEMS

Fire extinction

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLight series fire control panel provides the system with GAS extinguisher 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 detection system management (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: gas extinguisher cylinders
E: gas release nozels
F: gas collectors
G: pneumatic release valve
H: pilot cylinder for gas release
I: pilot cylinder electrovalve
L: pressure switch
M: manual activation button
N: stop extinguisher gas button
O: audio visual gas-release-imminent indicator
P: audio visual gas-present indicator

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 fire suppression system activation
- Supervised output for signaling activation (pre-extinguish)
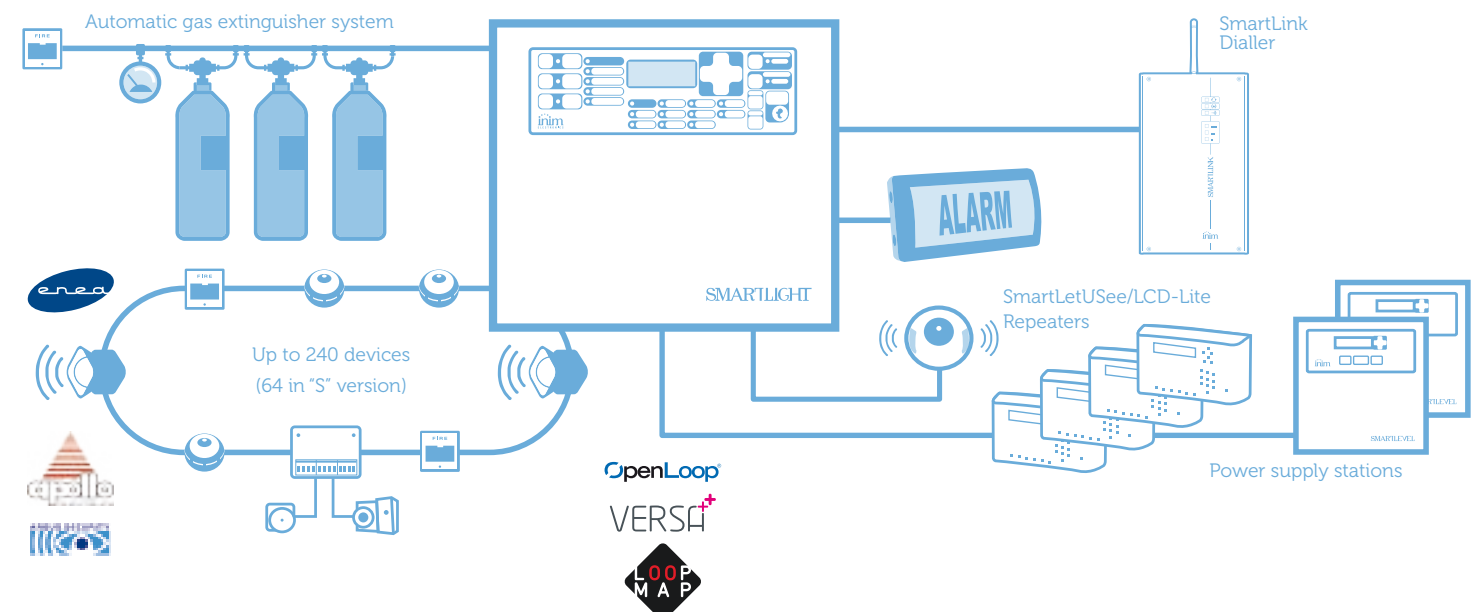- Supervised output for "Gas in area" signaling

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: expansion board.
SmartLetUSee/LCD-Lite: remote-control repeater panel for SmartLine and SmartLight control panels.
SmartLeague: programming and management software.
Link232F9F9: RS232 cable link between PC and INIM devices.
IPS24040: switching power supply/battery charger 1.4A@27.6Vdc.
ProbeTH: thermal probe for optimized battery charge.

Programming software

The SmartLeague programming and management software is intuitive and simple to use.
This indispensable tool allows security professionals to control INIM fire detection systems with ease. It allows fast and easy control panel configuration and offers an overall view of the system. It is also capable of providing detailed wiring diagrams of the system terminals in accordance with the configured settings.

Application diagram

Automatic gas extinguisher system

SmartLink Dialler

Up to 240 devices (64 in "S" version)

SmartLetUSee/LCD-Lite Repeaters

Power supply stations

SmartLoop

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

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 trouble-free 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 SmartLoop fire control panel with its plain language excels in application flexibility. Its versatility and ease of operation makes it perfect for all market segments, from medium commercial applications to large facilities such as hospitals, shopping malls and airports.

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 keypad and display.
SmartLoop2080/G: Control panel with 2 loops expandable to 8, equipped with keypad and display.
SmartLoop1010/S: Control panel with 1 loop, non-expandable, unequipped flush front.
SmartLoop2080/S: Control panel with 2 loops expandable to 8, unequipped flush front.

SmartLoop-P

SmartLoop-G

SmartLoop-S

The SmartLoop series of analogue addressable fire control panels marks a clear evolution from previous generations. This series has solutions to satisfy all market segments: from small domestic applications requiring 1 loop to large applications requiring 8 loops. At maximum configuration a SmartLoop system can support 30 control panels (arranged in a token-ring) and, if you consider that each control panel can manage up to 8 loops, and that each loop can accommodate as many as 240 devices, it is clearly apparent that the cutting-edge technology of the SmartLoop series has achieved excellence in application flexibility.

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 possibile by the appliance of multiprocessor architecture with self-diagnosis features co-ordinated by a 32 bit processor. This impressive hardware podium provides the processing resources necessary to ensure the highest levels of reliability, response speed, ease-of-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. Each of the SmartLoopINOUT terminals can be set up to operate as either a supervised output; a supervised input or a conventional detector zone. This important feature is yet another innovation pioneered by INIM. 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 (sigle channel);

Features and Technical specifications

- Analog-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 token- ring architecture
- Supports Emergency54 emergency configuration
  (CPU redundancy)
- Manages up to 30 panel token-ring network via
  the SmartLoop/NET board (accessory item)
- Easy remote access through SmartLAN board (accessory item)
- 2 or 4 wire loop connection
- Supports 240 devices per loop
- Manages up to 8 remote-control Repeater panels connected
  to the RS485 Interface
- Manages power stations on the RS485 BUS
- Manages a fire-suppression control panel on the RS485 BUS
- 3 general purpose NAC outputs
- 1 NAC Alarm output
- 1 NAC Trouble output
- 1 dry contact Alarm relay
- 1 dry contact Trouble relay
- RS485 BUS for Repeater panel connections
  (SmartLetUSee/LCD and SmartLetUSee/LED)
- Manages SmartLine020-4EXT and SmartLine036-4EXT fire
  extinguishing control panels via RS485 BUS
  RS485 BUS (maximum wire length between panels 1000m)

- Manages up to 8 remote-control Repeater panels on the
- 1 24 V power supply output for external devices
- 1 24 V resettable output
- Battery shutdown relay for deep discharge conditions
- RS232 and USB connectors for uploading/downloading data
- 2000 event buffer
- Self-enrolling (for loop devices)
- Self-addressing (for 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 options
- Fast keys (Test, Beeper, Silence, Reset, Evacuate, Investigate)
- Beeper (provides audible signals)
- User-friendly programming software (runs under Windows)
- Easy system programming from the control panel
- Code or key access to Level 2 functions (EN54 compliant)
- On-board connector for Thermal probe (accessory item).
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal box
- Mains power supply 230Vac $\pm$ 10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 480x470x135mm
- Weight (without batteries): 8Kg

SmartLoop system enhancement devices connectable on the RS485 BUS

SmartLetUSee/LCD – 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 and is ideal for installation in remote locations where system information and manual control are required. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.

SmartLetUSee/IP – IP remote control software for SmartLoop panels
The SmartLetUSee IP software application is capable of creating a virtual replica on your PC screen of the SmartLoop fire detection panel which is operating and connected to the Ethernet network.
The application allows you to access the system and operate on the virtual control panel in the same way as you would on the real control panel.

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. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.

SmartLetUSee/LED – Remote LED Repeater panel
This visual repeater panel provides 48 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 system enhancement devices connectable on the SmartLoop mother board

SmartLoop/2L – OpenLoop expansion board
SmartLoop/2L expansion boards provide two OpenLoop-technology loops. Up to 3 of these boards can be connected to each expandable control panel (2080 models only) in order to expand the panel to a maximum of 8 loops. OpenLoop-technology loops can be programmed to operate independently with many compatible device types such as Apollo and Argus. Non-expandable control panels (1010 models) cannot accomodate loop expansion boards.

SmartLoop/INOUT – Input and output expansion board
SmartLoop/INOUT expansion boards provide 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 SmartLoop/NET board allows the control panel to be configured in a SmartLoop HorNet network (token-ring). The ring can be created using a 3 pole cable. The maximum cable length of 2000 meters (allowed between each control panel) provides a highly fault-tolerant network. Using a supplementary 2 pole cable (5 poles in all), you can create a protection ring which can pass alarm conditions coming from a fire control panel with 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.). It has an 8 slot audio memory for up to eight voice call messages. Completely managed by its on-board microcontroller, it generates an emergency call in the event of a CPU fault, and guarantees an emergency call in the event of an alarm during control panel CPU fault.

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 fire control system (allows connection to all the fire control panels in the token-ring network). This board can send detailed e-mails for each event and, using TCP/IP, can send real-time event reports. This board also allows remote upload/download operations and provides a web server for web based access to the system.

SmartLAN/SF – Ethernet interface for Internet via TCP-IP
The SmartLAN/SF board connects to any Ethernet network and allowors remote access (via Internet) to the fire control system (allows connection to all the fire control panels in the token-ring network). This board also allows remote upload/download operations and allows the monitoring of the system by the SmartLook INIM software. Supports Modbus over TCP/IP

SmartLoop/PRN – On-front Printer Module
The SmartLoop/PRN thermal printer module can be mounted to the front of the control panel. It can be connected directly to the mother board by means of the connection cable (included in the package). It uses 82mm thermal roll paper and provides a continuous real-time printout of events and/or date to date enquiry printouts. It can also printout complete loop reports containing information about dust accumulation and detector functionality.
The SmartLoop/PRN can be mounted to SmartLoop1010P and SmartLoop2080P models only.
e SmartLoop/2080-P.

Control Panel Models	By design		Optional attachment boards					
	Keypad and Display	48 Status LED board	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
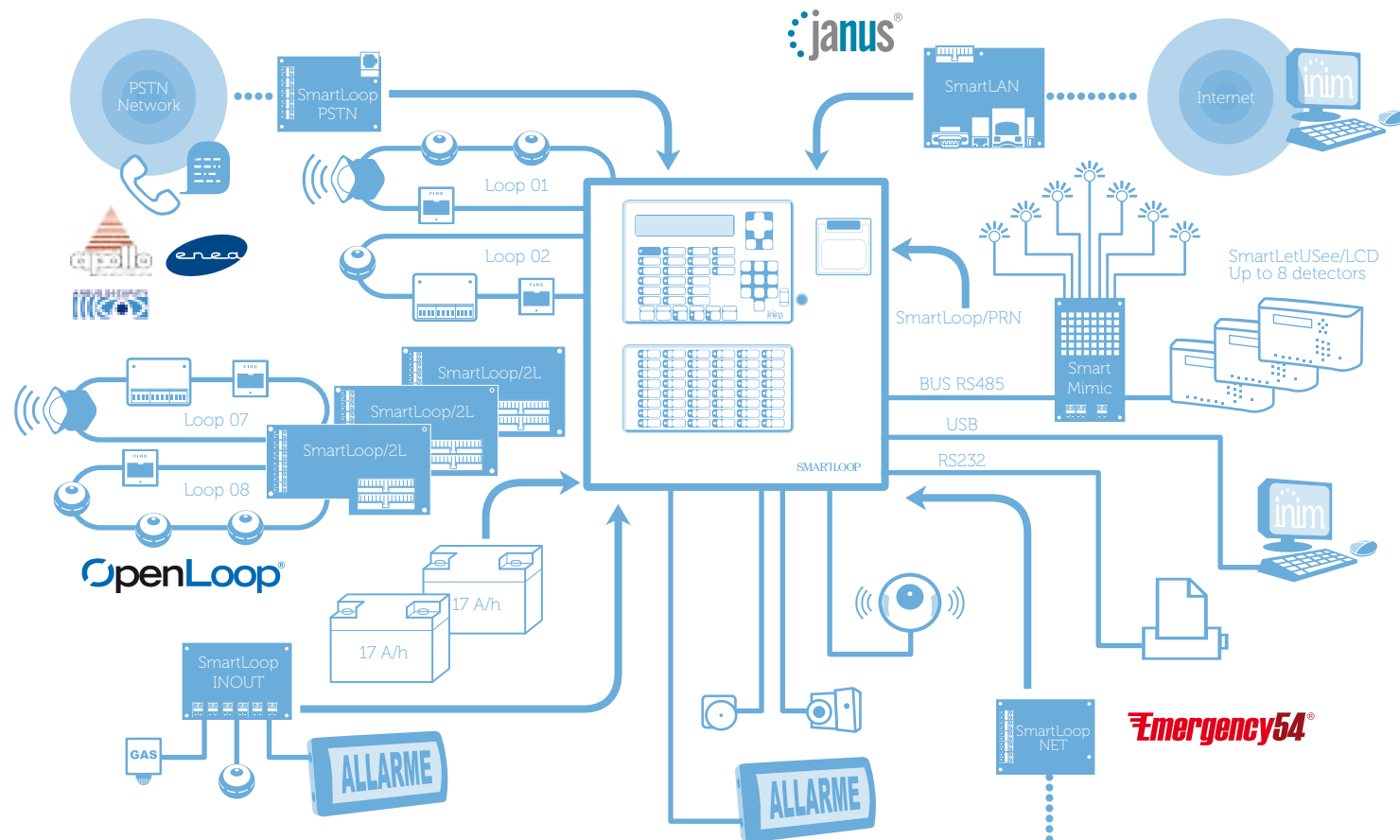
SmartLoop Net
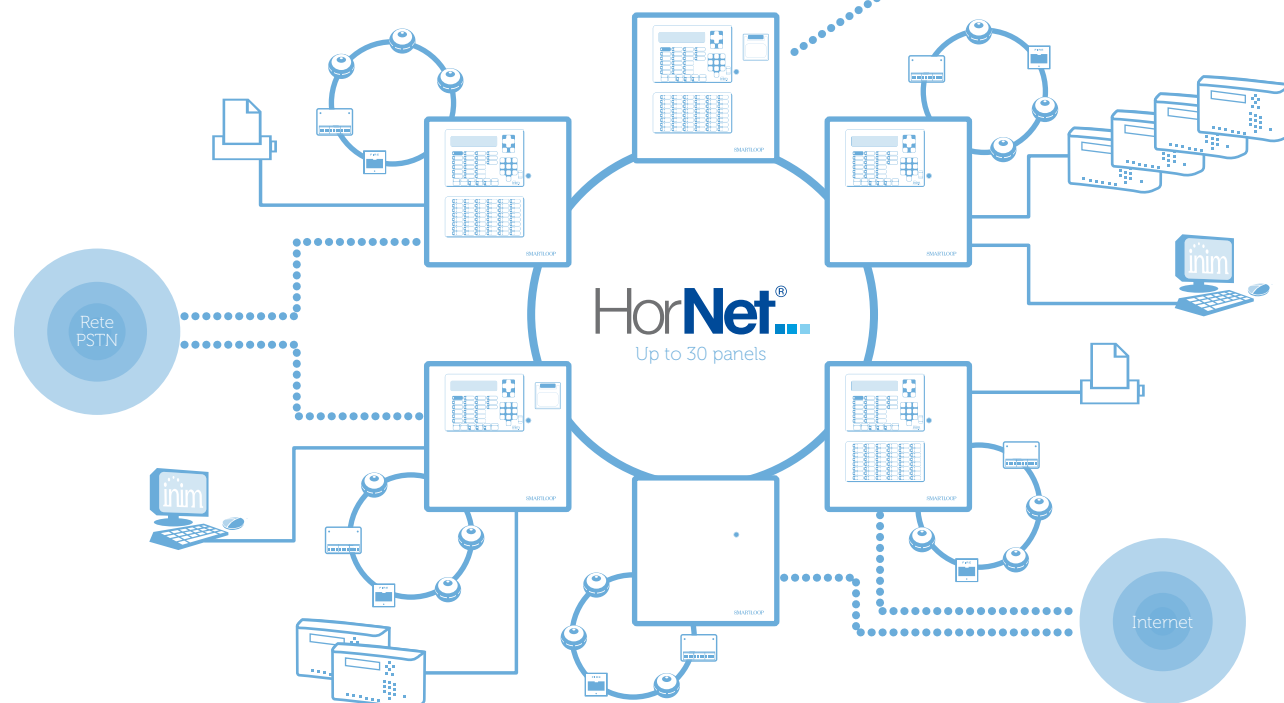
Fire detection and suppression systems

Operating voltage	230 Vac -15% + 10% 50/60Hz
Maximum internal power current	4 A
Maximum external load current (loop devices, external loads, accessory boards, etc.)	2,8 A
Battery specifications	12V @ 7Ah or 12V @ 17Ah
Operating temperature	Da -5° a +40° C
Dimensions	48 cm x 47 cm x 13,5 cm
Weight	8 Kg

Absorbed current by accessory boards

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
SmartLetUSeep/LCD	stby: 40mA MAX:50mA
SmartLetUSeep/LED	stby: 5mA MAX:50mA

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 unequipped flush front.
SmartLoop2080/S: control panel with 2 loops expandable to 8, with unequipped flush front.
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: landline digital and voice dialler board.
SmartLoopPRN: thermal printer module.
SmartLAN: ethernet interface for Internet connections over TCP-IP and remote programming and supervision.
SmartLAN/SF: ethernet interface for Internet connections over TCP-IP.
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 39.
SmartLeague: programming and management software for INIM products runs under Windows.
Link232F9F9: RS232 cable link between PC and INIM devices.
ProbeTH: thermal probe - protects the battery against overheating and consequent permanent damage.
SPS24060G - SPS24060S: switching power supply/battery charger 24V 1.5A.
SPS24160G - SPS24160S: switching power supply/battery charger 24V 4A.

ENEA
ADDRESSABLE ANALOGUE DETECTION

LPCB   CPR   EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11 EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

Enea
Addressable analogue detector

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 today. 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 unequalled 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, thus hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

Main Features
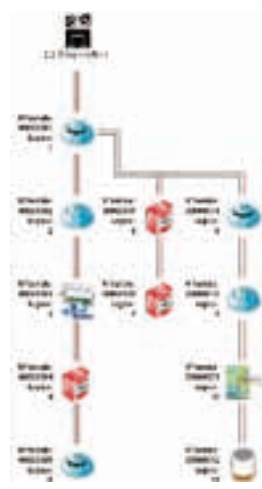
Loop mapping

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen.
- Tricolour LED: Red for alarm; Green flash for standby (optional) and for identification after manual activation from the control panel; Yellow for trouble (fault or high level of contamination in the optical smoke chamber)
- Integrated short-circuit isolator.
- 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 real-time values.
- Memory of the smoke and temperature levels measured in the five-minute period prior to the last alarm detected.
- Vast range of options.
- Bypass plate on base guarantees continuity in the event of removal of the detector from the line.

Parameter	ED100	ED200	ED300
Operating voltage	19-30 Vdc		
Consumption during standby	200 uA		
Consumption during alarm	Max 10 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 including base	46mm	54mm	
Diameter	110mm		
Weight (with base)	160g		
Weight (without base)	90g		

ED100 Optical smoke detector

LPCB   CPR

The ED100 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. The sensitivity can be configured to suit a wide range of applications (sensitivity configurable as: 0.08dB/m; 0.10dB/m; 0.12dB/m; 0.15dB/m).

ED200 Heat detector

LPCB   CPR

The ED200 heat detector can be configured in the following modes: A1R mode (fixed threshold at 58°C with thermovelocimetric detection); B mode (fixed threshold at 72°C); A2S mode (fixed threshold at 58°C); BR mode (fixed threshold at 72°C with thermovelocimetric detection).
As a result of high flexibility, this detector is useful in places where the environment is dusty or smoky and the risk of false alarms is high.

ED300 Smoke and Heat detector

LPCB   CPR

The ED300 smoke and heat detector has new smoke and temperature sensing technologies. As a result, this improved reliability detector responds well to all types of fires (especially to fast burning blazing fires involving inflammable liquids, which produce a limited amount of smoke) and is highly immune to false alarms. The ED300 can be set to the sensitivity mode which best suits the application:

- 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. Given the reduced response, it is necessary to evaluate the risk factor before selecting this operating mode
- SMOKE Mode: the detector will operate as per the ED100
- HEAT Mode: the detector will operate as per the ED200

EB0010 - Detector base
Detector base accommodates 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
elay base with a single relay which activates when the detector senses an alarm. The relay base allows you to interface the detector with intrusion control panels in domestic applications.
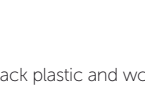
EB0030 - Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases, h 34 mm.

EB0040
Base protected against dripping water when tilted up to 15 degrees max.

EB0050
Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry.

EB0060
Mounted base with integrate buzzer driven by "R" output.

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

ENEA
ADDRESSABLE ANALOGUE DETECTION

LPCB CPR EN 54-7 EN 54-3
EN 54-5 EN 54-17
EN 54-11 EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

Modules

EM312SR Input output module

LPCB CPR

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 imput for external power supply
- 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 factory-assigned 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

LPCB CPR

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)
- Short-circuit isolator

- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing capacity (each device is identified by a manufacturer-assigned serial number)

EU311 Micromodule

LPCB CPR

The EU311 MicroModule, due to its reduced-size, can be housed directly inside the enclosure of the device it controls (callpoint, sounderflasher, 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
Consumption during standby	80 uA	80 uA	80 uA
Consumption 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)	29mm	29mm	15mm
Weight	66 g	66 g	15 g

EM3xx Multi Input/output module andconventional line interface

LPCB CPR

The module is connected directly to Loop and provide up to 4 input and 4 output according to model (refer to 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, according to model, can be supervised for sounder control or voltage free 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)

EC0010E Manual callpoint for outdoor installation (IP67)

LPCB CPR DBI

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

EC0020 Manual callpoint

LPCB CPR

- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag and LED confirm activation.

Suitable to use with WCP0020 (transparent plastic screen against accidental activation) and FCP0020 (Plstic bracket for flush mounting, adaptable to UK single gang back box). DBCP0020 – Deep box for external pipe fitting (base h = 33mm; base + callpoint h = 57mm).

ESB010 Sounder base

LPCB CPR VdS

To be installed under EB0010 mounting base. It connects to the remote output of the detector and is powered directly through the loop. The conditions of activation can be configured from the control panel.

Sound output @ 1m	Tones	Operating voltage	Current consumption
Up to 95dBA (adjustable)	32 selectable	17 – 60Vdc	2 -7mA (depending on tone)

ENEA
ADDRESSABLE ANALOGUE DETECTION

LPCB CPR EN 54-7 EN 54-3
EN 54-5 EN 54-17
EN 54-11 EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

ESB020 Sounder base and beacon

To be installed under EB0010 mounting base. It connects to the remote output of the detector and is powered directly through the loop. The conditions of activation can be configured from the control panel.

Sound output @ 1m	Tones	Operating voltage	Current consumption
Up to 95dBA (adjustable)	32 selectable	17 – 60 Vdc	8 mA

IL0010 Remote indicator

Remote fire-warning indicator.

ES0010RE and ES0010WE Addressable loop-powered sounder unit in red and white enclosure

LPCB CPR VdS NF

The loop-powered ES0010RE connects directly to the loop. Weatherproof to IP67, suitable for outdoor installation.

Sound output @ 1m	Tones	Operating voltage	Current consumption
Up to 106dBA (adjustable)	32 selectable	9 – 60 Vdc	4-41mA (depending on tone)

ES0020RE and ES0020WE Addressable loop-powered sounder/beacon unit in red and white enclosure

The loop-powered ES0020RE connects directly to the loop. Weatherproof to IP67, suitable for outdoor installation.

Sound output @ 1m	Tones	Operating voltage	Sounder Current consumption	Sounder Current consumption
Up to 106dBA (adjustable)	32 selectable	17 – 60 Vdc	4 - 41mA (depending on tone)	5 mA

ES0120 Loop Powered Visual Sounder alarm indicator

LPCB CPR

Sounder-Beacon with EN54-23 approved visual indication, Loop powered, IP65 protection rating.

Sound output @ 1m	Tones	Power consumption	Operating tempearture	Coverage pattern according to EN54-23
97 dB(A)	Selectable by DIP Switch	25 mA flash @0.5Hz 45 mA flash @ 1Hz	-25°C / +70°C	W-3.1-11.3 * C-3-15 *

*Depending on "WALL" or "CEILING" version.

ORDER CODES

ES0120RE: sounder/beacon red, for WALL mounting installation.
ES0120REC: sounder/beacon red, for CEILING mounting installation.
ES0120WE: sounder/beacon white, for WALL mounting installation.
ES0120WEC: sounder/beacon white, for CEILING mounting installation.

ES0140 Loop Powered Visual alarm indicator

LPCB CPR

Beacon with EN54-23 approved visual indication, Loop powered, IP65 protection rating.

Power consumption	Operating temperature	Coverage pattern according to EN54-23
20 mA flash @0.5Hz 40 mA flash @ 1Hz	-25°C / +70°C	W-3.1-11.3 * C-3-15*

*Depending on "WALL" or "CEILING" version.

ORDER CODES

ES0140RE: red beacon, for WALL Mounting installation.
ES0140REC: red beacon, for CEILING Mounting installation.

ES0040RE Addressable Led Beacon red - Deep Base

LPCB CPR

High efficiency LED beacon, Loop Powered (Enea Protocol).

Protection rating	IP66	Weight	250 g
Current consumption	5 mA	Dimensions	Ø 98 mm h 104 mm
Operating temperature	-25°C .. +70°C		

ESS022 Addressable warning sign

CPR

Visual/Audible alarm sign with certified EN54-3 audible signal capability and certified EN54-23 visual signal capability. 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 @ 1m	Light output	Dimensions	Current consumption
92 dB	EN54-23 W4,6-9,1	293 x 130 x 75mm	50 mA

ENEA
ADDRESSABLE ANALOGUE DETECTION

EN 54-7   EN 54-3
LPCB   CPR   EN 54-5   EN 54-17
EN 54-11 EN 54-18

ARGUS SECURITY
ADDRESSABLE ANALOGUE DETECTION

EITK1000-ToolKit
Tool for configuration, maintenance and diagnostics

Front view
of driver

Rear view of
driver

EITK100
ToolKit

The EITK1000 kit comprises an EDRV1000 driver and FireGenius software. This installer-friendly tool allows you to take full advantage of all the unique features of the LoopMap and Versa++ technologies integrated into ENEA series addressable-analogue detectors. By connecting the EDRV1000 driver to the loop and interfacing with a PC running FireGenius, you will be able to use the LoopMap technology to reconstruct a diagram of the loop wiring. The various devices connected to the loop are identified by their distinct serial numbers and types. The FireGenius software application (included in EITK1000 kit) is capable of reconstructing the wiring order along the cable and identifying and tracing eventual "T" junctions. The FireGenius software application presents the wiring in graphic form. By clicking-on the system elements, you will be able to ascertain the device status (for example, smoke level) and interact with it in real-time (for example, activate a LED or output). The EITK1000 kit allows you to take full advantage of all the unique features of the Versa++ technology and makes it possible to configure each detector to suit its specific environment.
The EITK1000 kit also permits you 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, read 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. This tool provides accurate diagnostics by locating the exact position of cable interruptions and short circuits. Additionally, it allows you to measure eventual current dispersion to earth and carry out loop tests in order to detect communication errors and anomalies. The software application allows you to configure a loop, save the configuration profiles and import them from the control-panel configuration software and also make printouts of test reports and the system configuration. The EDRV1000 driver (included in EITK1000 kit) is capable of operating autonomously by way of its internal battery, keypad and display. When the EDRV1000 driver is connected to a PC, it is powered through the USB port, in this way, it is possible to make full use of the FireGenius software application.
Through its intuitive graphic interface, FireGenius allows you to interact with the detectors, configure them, view their status and check the course of their real-time smoke/temperature levels. The EITK1000 is the professional tool which will make your life a whole lot easier when it comes to system maintenance. The EITK1000 comes with a 24Vdc power supply, essential cables and software application CD, all contained in a handy pouch.

Smoke and
temperature graph

Loop
configuration

ORDER CODES

EITK1000: kit for the configuration, maintenance and diagnostics of systems made up of IRIS and ENEA series devices.
The kit includes: EITK-DRV, EITK-BASE, EITK-PWSP.
EITK-DRV: driver for zones made up of IRIS series devices or loops with ENEA series devices.
EITK-BASE: base for IRIS and ENEA series detectors.
EITK-PWSP: power supply for the EITKDRV driver.

Vega
Analogue addressable detector series

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

KM96627

KM96626

KM96628

VEGA V100 - Intelligent Photo Detector
The signal processing used by this detector efficiently analyzes the conditions within the protected environment and ensures high immunity to false alarms.

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 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.

VEGA V200 - Optical Heat Detector
The detector design incorporates an advanced algorithm which uses more than one parameter (the combination of smoke inside the optical chamber and the temperature within the protected environment) to provide precise alarm evaluation and high immunity to false alarms.

Décor line
V100, V200 and V350 detectors are also available with décor line covers for aesthetically demanding environments.

Modules

	Wall mounting	Minimodule	DIN rail module
Single supervised input	VMI100	VMMI100	VMDI100
Single supervised output	VMC100	VMMC100	VMDC100
Input/Output Supervised Output	VMIC100	VMMIC100	VMDIC100
Input/Output Voltage free relay	VMIC120	VMMIC120	VMDIC120
Unsupervised output	VMC120	VMMC120	VMDC120

VMCZ100 - Conventional line interface module
This device allows you to interface a line of conventional devices (detectors, callpoints, etc.) to the loop. Supplied in its own enclosure 130x95x60 with IP66 protection rating.

VMIC404 - Module with 4 supervised inputs + 4 outputs (dry contacts)
This device occupies 8 addresses. Supplied in its own enclosure 210x170x65 with IP66 protection rating.

LPCB   CPR   EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11   EN 54-18

Callpoints

VCP100 - Addressable resettable Callpoint
VCP100 callpoints connect directly to the detection loops of addressable analogue control panels.

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 perfomance and reliability through time

VB100 - Standard base for analogue addressable VEGA series detectors

VDBS100 - Deep base for analogue addressable VEGA series detectors

Audio visual Signalling

VLS100 - Addressable Sounder
VLS100-AV - Addressable Sounder Beacon
VWLS100 - Addressable Weatherproof Sounder
VWLS100-AV - Addressable Weatherproof Sounder Beacon
Low power consumption. Compatible with all analogue addressable fire detection panels.
Loop powered.

IL0010 - Alarm Repeater
Replicates the signal generated by a detector in alarm status.

Accessories

VPU100 - Driver
Configures the addresses of Argus series devices.

VEGA-LINE DRIVER - PC Interface –Argus loop
Drives a detection loop using VEGA series devices directly from a PC.

XP95 Series Detectors

55000-620

LPCB   CPR   VdS

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

55000-420

LPCB   CPR   VdS

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 17 mA maximum. Built-in antiremoval protection.

55000-401

LPCB   CPR   VdS

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 17 mA maximum. Built-in antiremoval protection.

55000-885

LPCB   CPR   VdS

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 17 mA maximum. Detachable optical chamber for easy cleaning and maintenance. Certification: EN54/pt7 and pt5 VDS.

38531-771

Spare address card with plastic tag. The tag allows accurate identification and eliminates addressing errors during maintenance.

45681-321

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

LPCB | CPR | VdS

Low-profile optical smoke 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 17 mA maximum. Operating voltage 14-28 Vcc (polarity-insensitive).
Apollo Discovery protocol, Detachable optical chamber for easy cleaning and maintenance.
Certification: EN54/pt7.

58000-400

LPCB | CPR | VdS

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 17 mA maximum. Built-in antiremoval protection.

58000-700

LPCB | CPR | VdS

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 17 mA maximum. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.

58000-300

LPCB | CPR | VdS

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

LPCB | CPR | VdS

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

LPCB | CPR | VdS

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

LPCB | CPR | VdS

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.

Accessory items

53832-070

LPCB | CPR | VdS

Remote indicator provides visual signals relating to the status of detectors located in difficult-to-inspect places. Suitable for all types of detectors. Polarity insensitive.

55000-760

LPCB | CPR | VdS

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

LPCB | CPR | VdS

Interface for analogue control panels capable of managing an absorption line for conventional detectors. The interface comes with enclosure and terminal board. Complete with isolator.

55000-847

LPCB | CPR | VdS

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

LPCB | CPR | VdS

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. A red LED indicates interface alarm status. Polarity insensitive. Complete with isolator.

APOLLO
ADDRESSABLE ANALOGUE DETECTOR

LPCB CPR

EN54-3 EN54-11
EN54-5 EN54-18
EN54-7 EN 54-25

WIRELESS DEVICES
SAGITTARIUS

55100-908

LPCB CPR VdS

Analogue manual callpoint 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

LPCB CPR VdS

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. Supplementary power supply not required. White enclosure. Complete with isolator.

55000-278

LPCB CPR VdS

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. Supplementary power supply not required. White enclosure.

55000-878

LPCB CPR VdS

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 one-second intervals. Supplementary power supply not required.

Sagittarius
Argus wireless solutions

The Sagittarius 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 cost-inefficient, places such as: hotels, museums, churches or similar cultural sites.
The Sagittarius is the ideal way of enhancing a traditional hard-wired analogue addressable fire detection system with wireless devices. This is done by means of a translator which allows the control panel to manage both the translator and its devices as loop devices. The loop-powered system translator supports as many as 32 devices, it communicates with the control panel using the same protocol as the hard-wired devices.
All the commands used by the VEGA range are valid for all VEGA wireless devices: optical smoke detectors, heat detectors, multicriteria detectors, input modules, callpoints, 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
- Convenience in mounting and service
- Double battery (main and secondary) guarantees a correct supply for about 5 years. The battery status is monitored by the device

| 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

Translator

VW2W - Translator
Loop-powered wireless translation device. Processes signals from detectors, modules, callpoints and all wireless devices, then relays the information regarding the devices and its own status to the control panel.
SGCWE - Wireless translator
Stand-alone device equipped with two contacts: fault and alarm. Interfaces the Sagittarius system to conventional control panels or any other type of system.
SGWE - 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.

● VW2W / SGCWE
● SGWE
● Wireless Devices
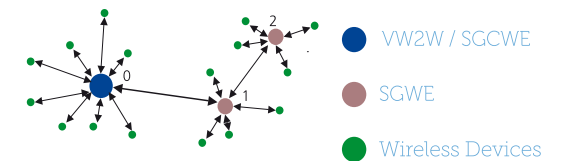
Detectors

SG100 - Wireless Optical Smoke Detector
SG200 - Wireless Optical Smoke/Heat Detector
SG350 - Wireless Temperature Detector

SGRBS100 - Wireless Base Sounder
SGRBS100-AV - Wireless Base Sounder Beacon Devices

Ancillaries

SGCP100 - Wireless Callpoint
SGMI100 - Wireless input module
SGMC100 - Wireless Output Module
SGMCB100 - Wireless Output Module - 2 outputs

SGRS100 - Wireless Sounder
SGVA100 -Wireless Voice Announcer
SGFI100 - Wireless Alarm Repeater - Addressable

Beam detectors

Beam 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.

Beam detector

Controller

Mounting plate

Prism reflector

Swivel bracket

Beam 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.
The system comprises a motorized head unit containing an infra-red transmitter and receiver, a ground level controller and prism reflector.
The presence of Smoke is revealed by the analysis of the returned infrared beam thus allowing the system to detect fire in its early stages.
Operational adjustments can be made from ground level by means of the controller unit.
The standard protection system covers a range of 5 to 40 meters.
Range-expander kits are also available: a 40 to 80 meter kit which uses 4 reflectors and an 80 to 100 meter kit which uses 9 reflectors.
Commission: the beam alignment phase is an extremely simple procedure. In fact, 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. You can check the status of the device on the display and need clean the lenses only when required.
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.

Enclosure	White high heat abs UL94 HB	Quiescent current	3 mA
Enclosure rating	IP65	Alarm current	3 mA
Operating temperature	-15°C/+55°C	Alarm latching	Non latching option
Time to fault	Adjustable between 1 and 60s	Fault relay	1A @ 30 V
Time to fire	Adjustable between 1 and 30s	Fire relay	1A @ 30 V
Sensitivity	Fully adjustable between 25% & 50%	Dimensions (WxHxD)	155x180x125 mm
Operating voltage	10.2 / 30 V	Weight	Head 1kg; Controller 0.5kg

ORDER CODES

BDH100: 5m-40m reflective optical beam detector.
Includes: a detection unit, a control unit, reflector unit.
BDHADAPT: Mounting plate for beam head or single reflector.

BDE4080: Range extension kit up to 80m.
BDE80100: Range extension kit up to 100m.
FB-BRACKET: swivel bracket.

Adaptors for duct applications
Duct application smoke detector enclosure

International standards and codes recognize the role heating and ventilation ducts play in the diffusion of smoke, toxic gases and flames throughout a building. Therefore in places where air ducts might assist the spread of flames and smoke it is necessary to take steps to safeguard the premises. One of the main aims of duct-smoke detection is to minimize the propagation of smoke and thus reduce the risk of panic, injury and even damage to property. An efficient fire detection system allows fast response and INIM's fire block range of products offers you everything you need to make you air duct system fully fire responsive.

EBDDH

DDH-BRKT

DDH-Cover

EBDDH - Universal adaptor 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.
TV - Air-sampling tube
The air-sampling tube 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 adaptor 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.
DDH-BRKT – Mounting bracket for circular ducts
This device fits to circular ducts and provides a flat mounting surface for the EBDDH.
DDH-COVER – Weatherproofcover
This cover is required when the EBDDH 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

Technical specifications

DDH dimensions (without tube)	180x183x235mm
DDH weight	700g
Sampling tube length	0,6-1,5-2,8m
Air velocity	0,5/20ms

ORDER CODES

EBDDH: universal tube adaptor.
TV-0.6: 0.6m sampling tube.
TV-1.5: 1.5m sampling tube.
TV-2.8: 2.8m sampling tube.

DDH-BRKT: mounting bracket for circular ducts.
DDH-COVER: weathertight cover.
DDH204: set of spare gaskets on.
DDH F1/10: dust filter.

ING7/INE7
Industrial gas detector series

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 explosionproof or dustproof enclosures to satisfy even the most exacting requirements. During the installation phase or maintenance sessions, you can interface INDUSTRIAL series detectors with a PC (via an INA55-700 interface) 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.

ING7 - Detector in IP55 enclosure
Detector housed in an IP55 protection rated dustproof metal enclosure. The sensitive element is located on the underside of the detector and is protected by stainless steel mesh. 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.

ING7

INE7 - Detector in explosionproof enclosure
II 2G Ex d IIC T6 ATEX certified detector in explosionproof 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.

- Configurable thresholds in L.I.E. or P.P.M. ratio or volume ratio (Oxygen detectors only) in relation to the detected gas.
- 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 (via INA55-700 interface) 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.

INE7

Orders for Detectors must specify not only the type of enclosure, but also the type of gas, the technology of the sensitive element and the type of output interface. Following is a schematic representation of the order codes.

IN Suffix	IN
G = IP55 enclosure / E = ATEX enclosure	h
Industrial series (7)	7
Type of GAS (see table 1)	nn
Detector technology (see table 2)	t
Hyphen	-
Type of interface (see table 3)	ii

TABLE 1

Code nn	Gas detected	Pre-set Pre-alarm/Alarm thresholds
00	Methane (CH4)	15/30 % L.I.E.
01	Special Gas (see Order Code Table)	15/30 % L.I.E.
02	Petrol fumes	15/30 % L.I.E.
03	Carbon monoxide (CO)	100 / 200 PPM
04	Hydrogen (H2)	15/30 % L.I.E.
05	LPG (Liquid Petroleum Gas)	15/30 % L.I.E.
06	Propane	15/30 % L.I.E.
07	Ammonia (Pre-alarm at 100 PPM, Alarm at 200 PPM)	100 / 200 PPM
08	Ammonia (Pre-alarm at 1000 PPM, Alarm at 2000 PPM)	1000 / 2000 PPM
09	Acetylene	15/30 % L.I.E.
10	Oxygen (Excess)	24% / 27%
11	Oxygen (Lack)	18% / 15%

TABLE 2

Code t	Technology of sensitive element of detector
S	Semiconductor
C	Catalytic
H	Electrochemical cell

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, 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
OC	3 Open Collector Outputs (Pre-alarm, Alarm, Fault)

Order Code Table

DETECTOR WITH SEMICONDUCTOR SENSITIVE ELEMENT IN IP55 ENCLOSURE

	OC	42	RL	AS-M	AS-C	LE	
	Open Collector	4-20 mA	Relay	For connection to INIM addressable modules	For connection to terminals on SmartLine conventional control panels	Direct connection to INIM loops	Replacement sensor
Methane	ING700S-OC	ING700S-42	ING700S-RL	ING700S-AS-M	ING700S-AS-C	ING700S-LE	INRG-700S
Special Gases*	ING701S-OC	ING701S-42	ING701S-RL	ING701S-AS-M	ING701S-AS-C	ING701S-LE	INRG-701S
Petrol fumes	ING702S-OC	ING702S-42	ING702S-RL	ING702S-AS-M	ING702S-AS-C	ING702S-LE	INRG-702S
Carbon monoxide	ING703S-OC	ING703S-42	ING703S-RL	ING703S-AS-M	ING703S-AS-C	ING703S-LE	INRG-703S
Hydrogen	ING704S-OC	ING704S-42	ING704S-RL	ING704S-AS-M	ING704S-AS-C	ING704S-LE	INRG-704S
LPG	ING705S-OC	ING705S-42	ING705S-RL	ING705S-AS-M	ING705S-AS-C	ING705S-LE	INRG-705S
Propane	ING706S-OC	ING706S-42	ING706S-RL	ING706S-AS-M	ING706S-AS-C	ING706S-LE	INRG-706S
Ammonia (200 PPM)	ING707S-OC	ING707S-42	ING707S-RL	ING707S-AS-M	ING707S-AS-C	ING707S-LE	INRG-707S
Ammonia (2000 PPM)	ING708S-OC	ING708S-42	ING708S-RL	ING708S-AS-M	ING708S-AS-C	ING708S-LE	INRG-708S
Acetylene	ING709S-OC	ING709S-42	ING709S-RL	ING709S-AS-M	ING709S-AS-C	ING709S-LE	INRG-709S

DETECTOR WITH SEMICONDUCTOR SENSITIVE ELEMENT IN ATEX ENCLOSURE

	OC	42	RL	AS-M	AS-C	LE	
	Open Collector	4-20 mA	Relay	For connection to INIM addressable modules	For connection to terminals on SmartLine conventional control panels	Direct connection to INIM loops	Replacement sensor
Methane	INE700S-OC	INE700S-42	INE700S-RL	INE700S-AS-M	INE700S-AS-C	INE700S-LE	INRE-700S
Special Gases*	INE701S-OC	INE701S-42	INE701S-RL	INE701S-AS-M	INE701S-AS-C	INE701S-LE	INRE-701S
Petrol fumes	INE702S-OC	INE702S-42	INE702S-RL	INE702S-AS-M	INE702S-AS-C	INE702S-LE	INRE-702S
Carbon monoxide	INE703S-OC	INE703S-42	INE703S-RL	INE703S-AS-M	INE703S-AS-C	INE703S-LE	INRE-703S
Hydrogen	INE704S-OC	INE704S-42	INE704S-RL	INE704S-AS-M	INE704S-AS-C	INE704S-LE	INRE-704S
LPG	INE705S-OC	INE705S-42	INE705S-RL	INE705S-AS-M	INE705S-AS-C	INE705S-LE	INRE-705S
Propane	INE706S-OC	INE706S-42	INE706S-RL	INE706S-AS-M	INE706S-AS-C	INE706S-LE	INRE-706S
Ammonia (200 PPM)	INE707S-OC	INE707S-42	INE707S-RL	INE707S-AS-M	INE707S-AS-C	INE707S-LE	INRE-707S
Ammonia (2000 PPM)	INE708S-OC	INE708S-42	INE708S-RL	INE708S-AS-M	INE708S-AS-C	INE708S-LE	INRE-708S
Acetylene	INE709S-OC	INE709S-42	INE709S-RL	INE709S-AS-M	INE709S-AS-C	INE709S-LE	INRE-709S

DETECTORS WITH SENSITIVE CATALYTIC ELEMENT IN IP55 ENCLOSURE

	OC	42	RL	AS-M	AS-C	LE	
	Open Collector	4-20 mA	Relay	For connection to INIM addressable modules	For connection to terminals on SmartLine conventional control panels	Direct connection to INIM loops	Replacement sensor
Methane	ING700C-OC	ING700C-42	ING700C-RL	ING700C-AS-M	ING700C-AS-C	ING700C-LE	INRG-700C
Special Gases*	ING701C-OC	ING701C-42	ING701C-RL	ING701C-AS-M	ING701C-AS-C	ING701C-LE	INRG-701C
Petrol fumes	ING702C-OC	ING702C-42	ING702C-RL	ING702C-AS-M	ING702C-AS-C	ING702C-LE	INRG-702C
Hydrogen	ING704C-OC	ING704C-42	ING704C-RL	ING704C-AS-M	ING704C-AS-C	ING704C-LE	INRG-704C
LPG	ING705C-OC	ING705C-42	ING705C-RL	ING705C-AS-M	ING705C-AS-C	ING705C-LE	INRG-705C
Propane	ING706C-OC	ING706C-42	ING706C-RL	ING706C-AS-M	ING706C-AS-C	ING706C-LE	INRG-706C
Acetylene	ING709C-OC	ING709C-42	ING709C-RL	ING709C-AS-M	ING709C-AS-C	ING709C-LE	INRG-709C

DETECTORS WITH SENSITIVE CATALYTIC ELEMENT IN ATEX ENCLOSURE

	OC	42	RL	AS-M	AS-C	LE	
	Open Collector	4-20 mA	Relay	For connection to INIM addressable modules	For connection to terminals on SmartLine conventional control panels	Direct connection to INIM loops	Replacement sensor
Methane	INE700C-OC	INE700C-42	INE700C-RL	INE700C-AS-M	INE700C-AS-C	INE700C-LE	INRE-700C
Special Gases*	INE701C-OC	INE701C-42	INE701C-RL	INE701C-AS-M	INE701C-AS-C	INE701C-LE	INRE-701C
Petrol fumes	INE702C-OC	INE702C-42	INE702C-RL	INE702C-AS-M	INE702C-AS-C	INE702C-LE	INRE-702C
Hydrogen	INE704C-OC	INE704C-42	INE704C-RL	INE704C-AS-M	INE704C-AS-C	INE704C-LE	INRE-704C
LPG	INE705C-OC	INE705C-42	INE705C-RL	INE705C-AS-M	INE705C-AS-C	INE705C-LE	INRE-705C
Propane	INE706C-OC	INE706C-42	INE706C-RL	INE706C-AS-M	INE706C-AS-C	INE706C-LE	INRE-706C
Acetylene	INE709C-OC	INE709C-42	INE709C-RL	INE709C-AS-M	INE709C-AS-C	INE709C-LE	INRE-709C

* SPECIAL GAS List (Depending on availability)
For item x701S-xx – Semiconductor: Methanol (Methyl Alcohol), Heptane, Toluene, Xylene, Acetone, Ethanol (Ethyl alcohol), Butane, Hexane
For item x701C-xx – Catalytic: Methanol (Methyl Alcohol),

DETECTORS WITH ELECTROCHEMICAL CELL TYPE SENSITIVE ELEMENT IN IP55 ENCLOSURE

	OC	42	RL	AS-M	AS-C	LE	
	Open Collector	4-20 mA	Relay	For connection to INIM addressable modules	For connection to terminals on SmartLine conventional control panels	Direct connection to INIM loops	Replacement sensor
Carbon monoxide	ING703H-OC	ING703H-42	ING703H-RL	ING703H-AS-M	ING703H-AS-C	ING703H-LE	INRG-703H
Oxygen (Excess)	ING710H-OC	ING710H-42	ING710H-RL	ING710H-AS-M	ING710H-AS-C	ING710H-LE	INRG-710H
Oxygen (Defect)	ING711H-OC	ING711H-42	ING711H-RL	ING711H-AS-M	ING711H-AS-C	ING711H-LE	INRG-711H

Technical Specifications

Operating voltage	11 – 30 Vdc	
Standby current draw	Semiconductor sensors	50 mA
	Catalytic sensors	70 mA
	Electrochemical sensors	30 mA
Current draw in Alarm status	Semiconductor sensors	80 mA
	Catalytic sensors	100 mA
	Electrochemical sensors	60 mA
Operating temperature	from -0 to +40 °C	
Weight	IP55 enclosure	370 g
	ATEX enclosure	1000g
Dimensions	IP55 enclosure	141x100x60 mm
	ATEX enclosure	165x90x80 mm
Maximum ambient air speed in the protected ambient	10 m/S	

Accessory items:

INA55-700 - Gas detector to PC interface
Interfaces the gas detector to a PC via USB port, allows you to read and change the detector parameters and simulate pre-alarm, alarm and fault status. Complete with CD containing the required management software.
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 - 8mm valve for disposable canisters
INA55-105 - Cup for ING7 gas detectors
To be used with 8mm valve
INA55-106 - Cup for INE7 gas detectors
To be used with 8mm valve

Disposable canisters	Gas
INB55-500	Propane 20% L.I.E.
INB55-501	Propane 40% L.I.E.
INB55-502	Methane 20% L.I.E.
INB55-503	Methane 40% L.I.E.
INB55-504	Hydrogen 20% L.I.E.
INB55-505	Hydrogen 40% L.I.E.
INB55-506	Acetylene 20% L.I.E.
INB55-507	Acetylene 40% L.I.E.
INB55-508	Carbon monoxide, 100 p.p.m.
INB55-509	Carbon monoxide, 200 p.p.m.
INB55-510	Oxygen 27% Volume
INB55-511	Isobutane 20% L.I.E.
INB55-512	Isobutane 40% L.I.E.

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 explosionproof enclosures for use in potentially explosive areas (II 2 G Ex d IIC T6 Gb)

GAS DETECTED	SENSITIVE ELEMENT TECHNOLOGY	3 RELAY OUTPUT + FAULT AND 4-20 MA		4-20 MA MODULE		MEASURING RANGE	REPLACEMENT CARTRIDGE		CALIBRA-TION CANI-STER	YEARS*
		IP55	ATEX	IP55	ATEX		IP55	ATEX		
Methane	CATALYTIC	SE137KM	SE138KM	TS292KM	TS293KM	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	SE137PM	SE138PM	TS292PM	TS293PM	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	INFRARED				TS293IM	0 - 100% LIE			BO200	
GPL	CATALYTIC	SE137KG	SE138KG	TS292KG	TS293KG	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	SE137PG	SE138PG	TS292PG	TS293PG	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	INFRARED				TS293IG	0 - 100% LIE			BO200	
Hydrogen	CATALYTIC	SE137KI	SE138KI	TS292KI	TS293KI	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	BO137PI	SE138PI	TS292PI	TS293PI	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
Petrol fumes	CATALYTIC	SE137KB	SE138KB	TS292KB	TS293KB	0 - 20% LIE	ZSK04	ZSK04/EX	BO200	5
	PELLISTOR	SE137PB	SE138PB	TS292PB	TS293PB	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
Ammonia	ELECTROCHEMICAL	SE137EA	SE138EA	TS220EA	TS293EA	0 - 300 ppm	ZSEA1	ZSEA1/EX	BO501	3
	ELECTROCHEMICAL	SE137EA-H	SE138EA-H	TS220EA-H	TS293EA-H	0 - 300 ppm			BO501	
Carbon monoxide	ELECTROCHEMICAL	SE137EC-S	SE138EC-S	TS220EC-S	TS293EC-S	0 - 300 ppm	ZSEC1	ZSEC1/EX	BO210	3
	ELECTROCHEMICAL	SE137EC-H	SE138EC-H	TS220EC-H	TS293EC-H	0 - 300 ppm		ZSEC2/EX	BO210	2
Hydrogen Sulphide	ELECTROCHEMICAL	SE137EH	SE138EH	TS220EH	TS293EH	0 - 100 ppm	ZSEH1	ZSEH1/EX	BO470	2
Nitrogen Oxide	ELECTROCHEMICAL	SE137EN	SE138EN	TS220EN	TS293EN	0 - 300 ppm	ZSEN1	ZSEN1/EX	BO472	2
Nitrogen Dioxide	ELECTROCHEMICAL	SE137EN2	SE138EN2	TS220EN2	TS293EN2	0 - 30 ppm	ZSEN2	ZSEN2/EX	BO018	2
Oxygen**	ELECTROCHEMICAL	SE137EO	SE138E0			0 - 25 % Volume	ZSEO1	ZSEO1/EX	BO015	2
Sulfur Dioxide	ELECTROCHEMICAL	SE137ES	SE138ES	TS220ES	TS293ES	0 - 20 ppm	ZSES1	ZSES1/EX	BO418	2

* Average life in clean air (years)
** Not connectible as 4-20 mA to I/O terminals of SmartLine.

GAS DETECTED	SENSITIVE ELEMENT TECHNOLOGY	3 RELAY OUTPUT + FAULT AND 4-20 mA		4-20 mA MODULE		MEASURING RANGE	REPLACEMENT CARTRIDGE		CALIBRATION CANISTER	YEARS*
		IP55	ATEX	IP55	ATEX		IP55	ATEX		
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	SE137EHCN	SE138EHCN	TS220EHCN		0 - 10 ppm	ZSEHCN		B0479	2
Hydrochloric Acid	ELECTROCHEMICAL	SE137EHCL	SE138EHCL	TS220EHCL	TS293EHCL	0 - 30 ppm	ZSEHCL	ZSEHCL/EX	WR000	2
Special GASES (BY REQUEST)	CATALYTIC**	SE137KX	SE138KX			0 - 20% LIE			BO200	5
	PELLISTOR**	SE137PX	SE138PX	TS292PX	TS293PX	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	PELLISTOR***		SE138PX-H		TS293PX-H	0 - 100% LIE			BO200	5
	INFRARED***				TS293IX	0 - 100% LIE				
Carbon Dioxide	INFRARED			TS220IC2	TS293IC2	0 – 5% Vol				
				TS220IC2-H	TS293IC2-H	0 – 5000 ppm				
CO + Petrol Fumes (for parking areas)	CATALYTIC			TS255CB			ZSEC1 - ZSK04		BO200 / BO210	
CO + Nitrogen Dioxide	ELECTROCHEMICAL			TS255CN2			ZSEC1 - ZSEN2		BO008 / BO018	

*   Average life in clean air (years)
** Ethyl acetate, Acetone, Iso-Propil Alcool (IPA), Ammonia, Heptane, Hexane, Ethanol (Ethyl alcohol)
*** Acetone, tert-Butyl alcohol, n-Buthyl alcohol (1-Butanol), iso-Buthyl alcohol-2-Methyl-1-Propanol, Iso-Propil Alcool (IPA), Iso-Propyl alcohol (Propan 1-ol), Ammonia, Petrol (unleaded), Butane, trans-Butene-2 (trans-But2ene), But-1-ene, cis-Butene-2 (cis-But2ene), Cyclohexane, Decane, Heptane, Hexane, Ethane, Ethanol (Ethyl alcohol), Ethylene, Hydrogen, iso-Butane, iso-Pentane, Methane, Butanone (MEK), Nitromethane, Nonane, Carbon Monoxide, n-Octane

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 – 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 Con 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

Aspirating Systems

Stratos aspirating systems provide the very earliest warning of fire. They are capable of drawing air through sampling pipes to a three-dimensional laser chamber with a removable filter cartridge. The pipe length can be between 50m to 100m long, depending on the model and the level of sensitivity required. The laser technology embedded in Stratos is capable of discriminating smoke from nuisance particles such as dust. This capability allows the system to reduce the false alarm rate yet still provide warning at the first trace of smoke, a feature which is particularly useful in applications that require extremely high sensitivity. 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 with no problem in systems where multipoint and linear detectors are scarce. Stratos is capable of providing the very highest levels of sensitivity in environments such as computer and electrical rooms. In order to meet the demands of such applications, Stratos offers a series of devices which facilitate protection and provide warning at the slightest trace of smoke.
Seconds count in fire detection but so do maintenance costs and Stratos is a winner on both counts. 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 removable filter cartridge allows field serviceability even in the dirtiest of environments and is just one of the many features that make these systems advantageous and cost-efficient. Different sensitivity and intervention thresholds can be obtained by simply adding or taking away air-flow inlets along the sample pipes. Such high-sensitivity coupled with advanced processing allow Stratos to be employed even in the most demanding applications.
Stratos is supplied with PIPECAD programming facilities as standard.

Stratos Micra 25

Micra 25 maintains all the distinctive features of Stratos (ClassiFire® Perceptive Artificial Intelligence Dual TechnologyLDD 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.
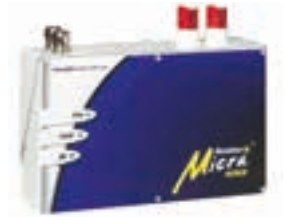 Supplied complete with PIPECAD software.

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 250mA @ 24V DC
- Dimensions: 140W x 200H x 85D
- Weight: 1.7kg
- Operating temperature range: -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%
- 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: 25m
- Maximum sampling pipe length in a static-air environment: 50m
- Sampling pipe diameter: 3/4" (27mm 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.
- Cabinet rating: IP50
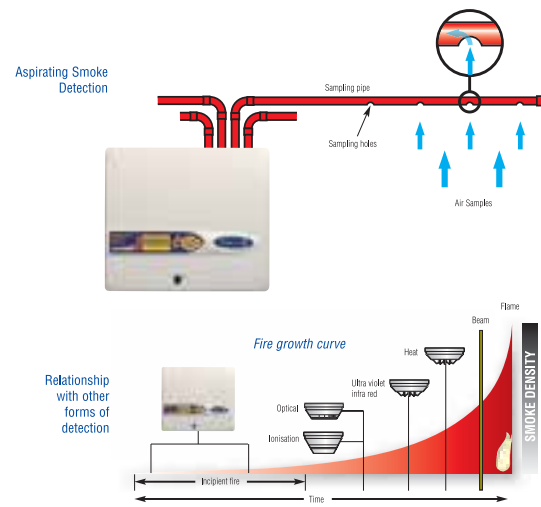
Stratos Micra 100

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 100m.
Supplied complete with PIPECAD software.

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 400mA @ 24V DC
- Dimensions: 300W x 220H x 85D
- Weight: 3.8kg.
- Operating temperature range: -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: 50mt
- Maximum sampling pipe length in a static-air environment: 100mt
- Sampling pipe diameter: 3/4" (27mm 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
- Cabinet rating: IP50

Stratos HSSD 2

Stratos HSSD is capable of drawing air from the protected area through four sampling pipes of up to 100m each, for a maximum total length of 200m. It is equipped with keypad and display and provides information regarding system operating status and eventual alarm conditions.
Supplied complete with PIPECAD software.

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 450mA @ 24V DC (aspiration velocity=8).
- Dimensions: 427W x 372H x 95D
- Weight: 5.2kg
- Operating temperature range: -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 100m
- Maximum total pipe length: 200m @ 80 holes 200 m @ 100 holes
- Sampling pipe diameter: 3/4" (27mm 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
- Cabinet rating: IP50

ORDER CODES

IN30621: aspirating system HSSD 2.
IN30671: aspirating system Micra25.
IN30672: aspirating system Micra100.

IN30436: relay board for stratos micra.
IN30755: dust filter for Stratos Micra.
IN30699: 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° Curve Red.
CM 10927 - Tube end cap Red.
CM 10915 - Coupling sleeve Red.
CM 10915 - Coupling sleeve Red for inspection
CM 10909 - 'T' Junction Red.
CM 10925 - Sample point (flexible tube with sample point).
CM10954 - Pipe Support (replace CM10930).
CM10960 - Labels for holes location (100 pcs).

Flame detectors

Technical specifications

Power Supply	14-30 Vdc
Power Consumption	MAX 30 mA
IP Rating	IP65
Sensitivity Class	1 according to EN54-10
Output signals	Alarm Relay, Fault relay

IR^2 Flame detector

Dual infra red flame detector, designed to protect areas where open fires may be expected.

016581 - IR^2 Flame detector.
016571 - IR^2 Flame detector Intrinsecally Safe.
016511 - IR^2 Flame detector in explosion proof enclosure.

IR^3 Flame detector

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

016589 - IR^3 Flame detector.
016579 - IR^3 Flame detector Intrinsecally Safe.
016519 - IR^3 Flame detector in explosion proof enclosure.

IR^2/UV Flame detector

Ultra Violet, dual infra-red flame detector, designed to protect areas where open fires may be expected, Hi false alarm rejection.

016591 - UV/IR^2 Flame Detector.
016521 - UV/IR^2 Flame detector in explosion proof enclosure.

Mounting Brackets

007127 - Adjustable Mounting Bracket Stainless Steel.

012545 - Stainless Steel Weather Shield.

007310 - Stainless Steel Weather Shield For Exd Housings.

## Conventional detectors and accessory items Atex Certified

ORBIS IS (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 principles diagram (on the right) illustrates the wiring method required for IS addressable detectors and the accessories to utilize.

Galvanic barrier
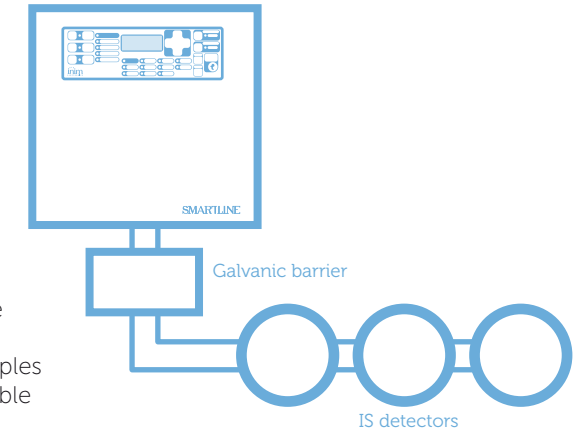
IS detectors

ORB-OP-52027 - IS Conventional optical smoke detector, category II 1G Ex ia IIC T5 (T4 to Ta<60°C)
ORB-OH-53027 - IS Conventional optical smoke/heat detector, category II 1G Ex ia IIC T5 (T4 to Ta<60°C)
ORB-HT-51145 - IS AIR Conventional heat detector (Rate-of-rise)
category II 1G Ex ia IIC T5 (T4 to Ta < 60°C)
ORB-HT-51151 - IS Conventional heat detector BS (Fixed threshold)
category II 1G Ex ia IIC T5 (T4 to Ta < 60°C)
ORB-MB-50018 - Mounting base for Orbis Intrinsically Safe conventional detectors
55100-031 - Intrinsecally Safe Orbis call point for indoor application.
55100-033 - Intrinsecally Safe Orbis call point for outdoor application.
29600-378 - Galvanic barrier for conventional detectors – DIN rail moun

Addressable detectors and Apollo XP95 accessory items Atex Certified

XP95 IS (Intrinsically Safe) is a range of conventional 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 principles diagram (on the right) illustrates the wiring method required for IS addressable detectors and the accessories to utilize.

SmartLoop

Contriol translator

Galvanic barrier
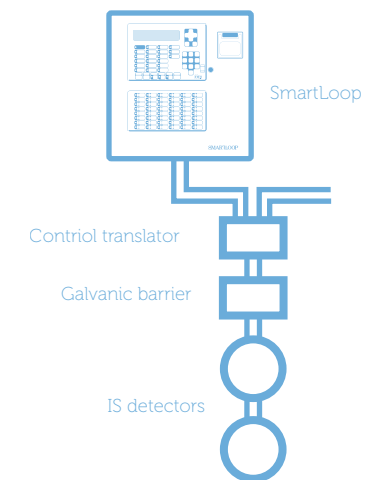
IS detectors

55000-640 - IS Addressable optical smoke detector - Approved E Ex ia IIC T5 (T4 to Ta < 60°C)
55000-440 - IS Addressable heat detector - Approved E Ex ia IIC T5 (T4 to Ta < 60°C)
45681-215 - IS Mounting base for addressable detectors
55100-940 - IS Addressable callpoint - Approved E Ex ia IIC T5 (T4 to Ta < 60°C)
55000-855 - Single channel protocol translator - DIN rail mount
55000-856 - Dual channel protocol translator - DIN rail mount
29600-098 - Galvanic barrier for analogue detectors - DIN rail mount

Atex sounders

17-970328

IS sounder is an audible signalling device for installation in explosive atmospheres.
- Category 1 (per zone, type 0, 1 and 2) - Approval ATEX - Ex II EEx ia IIC T4

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

17-970330

IS Sounderflasher suitable for installation in explosive atmospheres.
- Category 1 (for zones type 0,1 and 2) - Approval ATEX - Ex II EEx ia IIC T4

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

17-970362

Zener Barrier for IS Sounders Mounted on DIN rail, capable of powering 2 sounders.

17-970271

High-powered sounder in flameproof enclosure suitable for installation in explosive atmospheres.
- Category 2 (for zones type 1 and 2) - Approval ATEX - Ex II 2G EEx IIC T4

Tones	32 selectable by means of a DIP Switch
Sound output @1 m	117 dB(A) (configurable)
Protection rating	IP67
Operating voltage	24 Vdc
Current consumption	265 mA
Operating temperature	-50°C - +55°C
Weight	3,4Kg
Dimensions	181 (diameter) x 262 (height) mm

17-970274

Flasher in flameproof enclosure suitable for installation in explosive atmospheres.
- Category 2 (for zones type1 and 2) - Approval ATEX - Ex II 2G EEx IIC T4.

Light output	5 J
Protection rating	IP67
Operating voltage	24 Vdc
Current consumption	300 mA
Operating temperature	-50°C - +40°C
Weight	2,45Kg
Dimensions	153 (diameter) x 246 (height) mm

17-970234

Bell in flameproof enclosure for audible signalling in esplosive atmosphere.
- Category 2 (for zones type 1 and 2) - Approval ATEX - Ex II 2G EExd and IIC T6

Sound output @ 1 m	105 dB(A)
Protection rating	IP66
Operating voltage	24 Vdc
Current consumption	320 mA
Operating temperature	-20°C - +40°C
Weight	3,5 Kg
Dimensions	200 (diameter) x 270 (Alluminium mounting base) mm

Atex beam detectors

ARDEA Eex S-SF

Atex Smoke Beam detector.
- Barrier TX - RX - Cat. 2GD-EXD IICT6 - From 5 to 100m

Accessory items

29600-131
Alluminium deckhead mounting box with access ports threaded to fit PG16 glands. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

29600-139
Alluminium deckhead mounting box with access ports threaded to fit M20 components. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

29600-196
Plastic deckhead mounting box with access ports threaded to fit PG16 glands. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

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).
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. Intended for use in commercial and industrial applications.
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	FM
EPC220	105°C	-40 ÷ +79°C	UL, FM

EPR 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	Installation Temperature	Certification
XLT135	57°C	-57 ÷ +38°C	UL, FM

EPR type cable with flame retardant polypropylene outer racket. Good resistance to common chemicals.

Model	Alarm Temperature	Installation Temperature	Certification
EPR155	68°C	-40 ÷ +38°C	UL, FM
EPR190	88°C	-40 ÷ +66°C	UL, FM
EPR280	138°C	-40 ÷ +93°C	UL, FM
EPR356	180°C	-40 ÷ +121°C	UL, FM

XCR type cable with durable flouropolymer outer racket. Good resistance to common chemicals and acids.

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	FM
XCR280	138°C	-40 ÷ +93°C	UL, FM
XCR356	180°C	-40 ÷ +121°C	UL, FM

TRI type cable with durable vinyl outer racket. Capable of initiating separate pre-alarm and alarm signals once each of its rated activation temperatures are reached.

Model	Alarm Temperature	Installation Temperature	Certification
TRY	68°C (pre-alarm) 93°C (alarm)	-40 ÷ +38°C	FM

Visual/Audible signalling devices

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

Visual/Audible signalling devices play a key role in every fire detection system. In the event of a fire, these are the devices that warn persons in the area of imminent danger. Sounders, bells and strobe lights are just some of the devices INIM offers in its extensive product line-up.

Conventional visual/audible signalling devices

IS0010RE – Sounder in Red
IS0010WE – Sounder in White
IS0010RES – Audible/Visual signalling device with low-profile base in red plastic

NF LPCB CPR VdS

These audible signalling devices operate at 17 to 60 Vdc.
Protection rating IP65 (IP 21 for the low-profile base). Complete with mounting base. They provide 32 tones configured by means of a DIP switch. The volume is easily adjusted using the internal trimmer.

Tones	32 tones selectable by means of a DIP Switch	Current consumption	From 4 to 41 mA (depending on the selected tone)
Sound output @ 1 m	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)	Operating temperature	-25°C - +70°C
		Wire Entry	2 x 20mm on base
Protection rating	IP65 (IP 21 for the low-profile base)	Weight	250g
Operating voltage	17 – 60 Vdc	Dimensions	Ø 98 mm h 104 cm (h 80 mm for the low-profile base)

IS0120 – Conventional Visual Sounder alarm indicator

LPCB CPR

Acoustic and visual alarm indicator approved according new EN54-23 standard, IP65 protection rated (deep base version only), Operating voltage from 17 to 60 Vdc, mounting base included.
Selectable tone among 32 available by means of DIP SWITCH, flashing frequency selectable at 0,5Hz / 1Hz (by means of DIP SWITCH), 2 selectable sound level

Operating voltage	Sound output @ 1m	Tones	Power consumption	Operating tempearture	Coverage pattern according to EN54- 23
Da 17 a 60 Vdc	97 dB(A)	32 – selezionabili tramite DIP Switch	25 mA flash @0.5Hz 45 mA flash @ 1Hz	-25°C / +70°C	W-3.5-11.5 C-3-15

ORDER CODES

IS0120RE: red sounder/beacon, deep base, for WALL mounting installation.
IS0120RS: red sounder/beacon, shallow base, for WALL mounting installation.
IS0120REC: red sounder/beacon, deep base, for CEILING mounting installation.
IS0120RSC: red sounder/beacon, shallow base, for CEILING mounting installation.
IS0120WE: white sounder/beacon, deep base, for WALL mounting installation.
IS0120WEC: white sounder/beacon,deep base, for CEILING mounting installation.

IS0020RE – Audible/Visual signalling device in red plastic enclosure with red lens
IS0020WE – Audible/Visual signalling device in white plastic enclosure with white lens and red LEDs
IS0020RES – Audible/Visual signalling device with low-profile base in red plastic with red lens

These audible signalling devices operate at 17 to 60 Vdc.
Protection rating IP65 (IP 21 for the low-profile base). Complete with mounting base. They provide 32 tones configured by means of a DIP switch. The volume is easily adjusted using the internal trimmer.

Tones	32 tones selectable by means of a DIP Switch	Current consumption Visual section	5 mA
Sound output @ 1 m	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)	Operating temperature	-25°C - +70°C
		Wire Entry	2 x 20mm on base
Protection rating	IP65 (IP 21 for the low-profile base)	Weight	250g
Operating voltage	17 – 60 Vdc	Dimensions	Ø 98 mm h 104 cm (h 80 mm for the low-profile base)
Current consumption Audible section	From 4 to 41 mA (depending on the selected tone)		

IS0030RE – High powered sounder

LPCB CPR VdS

These audible signalling devices operate at 10 to 60 Vdc. Protection rating IP66. 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	Current consumption-audible setion	Up to a 550 mA (depending on the selected tone)
Sound output @ 1 m	120 dB(A) configurable	Operating temperature	-25°C - +70°C
Protection rating	IP66	Weight	1,8Kgg
Operating voltage	10 – 60 Vdc	Dimensions	166 x 150 mm

IS0040RE – Led Beacon red – Deep Base.
IS0040RES –Led Beacon red – Shallow Base.

High efficiency LED beacon, 17 to 60 Vdc Power supply, IP65 rating for deep base version, IP21 for shallow base version.

Protection rating	IP65 for Deep base version, IP21 for shallow base version	Weight	Weight 215 g (shallow base) – 250 g (deep base)
Operating voltage	17 – 60 Vdc	Dimensions	Dimensions Ø 98mm h 104 mm (Deep Base) 80 mm (Shallow base)
Current consumption	5 mA		
Operating temperature	-25°C .. +70°C		

IS0041RE – Xenon Beacon – Deep Base.
IS0041RES – Xenon Beacon – Shallow Base.

2J xenon beacon 10 to 60 Vdc Power supply, IP65 rating for deep base version, IP21 for shallow base version.

Protection rating	IP65 for Deep base version, IP21 for shallow base version	Weight	Weight 215 g (Shallow Base) – 250 g (Deep Base)
Operating voltage	10 – 60 Vdc	Dimensions	Dimensions Ø 98 mm h 104 mm (Deep Base) 80 mm (shallow base)
Current consumption	130 mA @24Vdc		
Operating temperature	-25°C .. +55°C		

IS0140 – Conventional Visual alarm indicator.

LPCB CPR

Visual alarm indicator approved according new EN54-23 standard, IP65 protection rated (deep base version only), Operating voltage from 17 to 60 Vdc, mounting base included. Flashing frequency selectable at 0,5Hz / 1Hz (by means of DIP SWITCH).

Operating voltage	Da 17 a 60 Vdc	Operating tempearture	-25°C / +70°C
Power consumption	20 mA flash @0.5Hz 40 mA flash @ 1Hz	Coverage pattern according to EN54- 23	W-3.5-11.5 * C-3-15*

*Depending on "WALL" or "CEILING" version

ORDER CODES

IS0140RE: red conventional beacon,deep base, for WALL mounting installation.
IS0140REC: red conventional beacon, deep base, for CEILING mounting installation.

IS0140RS: red conventional beacon, shallow base, for WALL mounting installation.
IS0140RSC: red conventional beacon,shallow base, for CEILING mounting installation.

ISC010 – 6" bell

LPCB CPR

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

Sound output @ 1 m	95 dB(A)	Operating temperature	-10°C - +55°C
Protection rating	IP21	Weight	920g
Operating voltage	19 – 28 Vdc	Dimensions	160 x 64 mm
Current consumption	20 mA		

ISC010E – 6" bell for outdoor use

LPCB CPR

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

Sound output @ 1 m	95 dB(A)	Operating temperature	-10°C - +55°C
Protection rating	IP33C	Weight	920g
Operating voltage	19 – 28 Vdc	Dimensions	160 x 64 mm
Current consumption	20 mA		

ESB010 – Sounder base

LPCB CPR VdS

Designed to be fitted under the EB0010 base, it connects to the remote output of the detector. When used with an addressable detector, it is powered directly through the loop. When used with a conventional detector, it must be driven by a separate line (NAC Output).

ESBC010 – Cover for sounder base

Allows the sounder base to be used as an autonomous sounder disengaged from the detector.

Sound output @ 1m	Tones	Operating voltage	Absorption
Up to 95dBA (configurable)	32 selectable	17 – 60 Vdc	2 – 7 mA (depending on the selected tone)

ESB020 – Sounder base and beacon.

Designed to be fitted under the EB0010 base, it connects to the remote output of the detector. When used with an addressable detector, it is powered directly through the loop. When used with a conventional detector, it must be driven by a separate line (NAC Output).

ESBC020 – Coperchio per base sirena/lampeggiatore.

Allows the sounder base to be used as an autonomous sounder disengaged from the detector.

Sound output @ 1m	Tones	Operating voltage	Current consumption
Fino a 95dBA (configurable)	32 selectable	17 – 60 Vdc	8 mA

Audible/Visual warning signs

ISS022 – Audible/Visual Alarm Sign.

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability and certified EN54-23 visual signal capability. Comes with "FIRE ALARM" warning. Various warnings available on request.

Sound output @ 1m	92 dB
Light output	EN54-23 W4,6 - 9,1
Operating voltage	18 – 30 Vdc

Dimensions (LxWxD)	293 x 130 x 75mm
Consumption	50 mA
Flash rate	1 Hz

Ivy
Self-powered outdoor sounder/flasher

The IVY series self-powered sounder/flasher units are a stylish yet highly efficient way of rounding off an intrusion control system. Easy to program, and even easier to install, these units boast unmatched features and performance.
The external heavy duty cover swings down on easy-to-free hinge projections (located on the both sides of the backplate) to provide a very practical tool ledge. A metal inner-shroud protects all the components and reinforces the casing. New-generation Light-Emitting-Diode technology provides super-bright flasher signals and allows extra low power consumption. 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
Power supply (when equipped with step-down switching converter STD241201)	24 V dc
Sound output (@ 24 Vdc - 3m)	MAX 103 dB (A)
IP 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.
With Smarty there is no losing out on performance. Italian quality at the best price.
The Smarty is fully microprocessor-controlled to ensure excellence in performance.
Uses piezoelectric sounder and super bright LED-tecnology flasher.
A direct move towards superior signalling features and low power consumption.

- Piezoelectric sounder
- LED technology flasher

Technical features
Power supply	24 V dc
Current draw	MAX 50 mA
Sound output (@ 24 Vdc - 1m)	MAX 105 dB (A)
Light Intensity (1m)	25 lux
IP rating	IP 31
Operating temperature	0 / 50 °C
Dimensions (HxWxD)	75 x 112 x 30 mm
Weight	110 g

ORDER CODES

IVY-R: self-powered sounder/flasher for outdoor use.
Smarty-GFR: indoor sounder/flasher.

Accessory items for Fire extinction systems

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.

Callpoints in various colours
IC0020Y - Conventional Callpoint in yellow enclosure
IC0020G - Conventional Callpoint in green enclosure
IC0020B - Conventional Callpoint in blue enclosure
IC0020W - Conventional Callpoint in white enclosure

Callpoint non-latching, automatic reset on release, supplied without label
ICB010Y - Callpoint in yellow enclosure
ICB010G - Callpoint in green enclosure
ICB010B - Callpoint in blue enclosure
ICB010W - Callpoint in white enclosure

Keyswitch
ICK010Y - Keyswitch in yellow enclosure
ICK010G - Keyswitch in green enclosure
ICK010B - Keyswitch in blue enclosure
ICK010W - Keyswitch in white enclosure

ISS022 – Conventional Audible/Visual Warning Sign.
Visual/Audible alarm sign in red with certified EN54-3 audible signal capability and certified EN54-23 visual signal capability. Comes with "FIRE ALARM" warning. Various warnings available on request.

Sound output @ 1m	92 dB
Light output	EN54-23 W4,6-9,1
Operating voltage	18 – 30 Vdc
Dimensions (LxWxD)	293 x 130 x 75mm
Consumption	50 mA
Flash rate	1 Hz

Hold open electromagnets and accessory items

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 electromagnetic holders.
The following section describes an array of hold and release devices suitable for the majority of fire doors.

DR01630I

Hold open electromagnets for fire doors. Base and fixed counterplate in zinc plated steel.

Operating voltage	24 Vdc	Base dimensions	65 x 65 x 3mm
Current consumption	65 mA	Electromagnet diameter	50mm x 39mm
Holding force	>55Kg		

DR01830I
Hold open electromagnets for fire doors. Base and fixed counterplate in zinc plated steel.

Operating voltage	24 Vdc	Base dimensions	65 x 65 x 3mm
Current consumption	70 mA	Electromagnet diameter	70mm x 39mm
Holding force	>140Kg		

DR19001
Hold open eletromagnets for fire doors with door release button. Enclosure in black ABS. Supplied without counterplate (to be purchased separately).

DR19002
Hold open eletromagnets for fire doors with door release button. Enclosure in black anodized aluminium. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc	Holding force	>55Kg
Current consumption	60 mA	Base dimensions	90 x 75 x 35mm

DR18005
Hold open eletromagnets for fire doors with door release button. Fixed floor mount. Body in black or white painted aluminium [DR 18005B]. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc	Holding force	>55Kg
Current consumption	60 mA	Base dimensions	90 x 75 x 35mm

DR01805Z
Swivel counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005 magnets.
Complessive Dimensions 65 x 65 x 54mm.

DR01800Z
Fixed counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005 magnets.
Complessive Dimensions 65 x 65 x 28mm.

DR18101
Hold open eletromagnets for fire doors with door release button. Body in black painted steel. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc	Holding force	>140Kg
Current consumption	70 mA	Base dimensions	100 x 90 x 43mm

DR01815Z
Swivel counterplate with base in zinc plated steel for DR18101 magnets. Complessive Dimensions 65 x65 x 54mm.

DR01810Z
Fixed counterplate with base in zinc plated steel for DR18101 magnets. Complessive Dimensions 65 x65 x 33mm.

DR01740
Mounting telescopic bracket for wall or floor mounting.
Body in black painted steel. 180° swing door-retainer fixing plate.
Length 140mm (adjustable up to 200mm).

SmartLevel
24V power supply station

SmartLevel series power stations are ideal for supplying power to all the devices located in the area protected by the detection system. They are completely supervised and fully approved to meet EN54 requirements. They have a new switching module with resonant technology and an internal CPU for reliable, efficient and secure power management.

Available in 2 versions:
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 @ 27.V 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: above 1%.
- 3 outputs, each protected against short circuit and with a 4A current limit. (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
- Battery supervision
- Deep discharge protection (disconnects batteries)
- Fault signal relay output
- Detection of dispersion-to-earth fault
- Certified CPD EN54-4

SPS24060G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg

SPS24160G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497 x 380 x 87 mm
- Weight (without batteries): 6 kg

SPS24060S

- Connects to the detection loop
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg

SPS24160S

- Connects to the detection loop
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497 x 380 x 87 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.
"In box" versions of both models are available. The "in box" version consists of a switching power supply module inside a metal enclosure that also provides housing for two 12V batteries. 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 - Power supply module @ 1.5A
BPS24060G - In box power supply module @ 1.5A

- CPU based power supply
- Input Voltage: 230Vac $\pm$ 15%, 50Hz
- Mains absorption: 0.4A
- Output Voltage: 27.6Vdc
- Maximum Current: 1.5Adc
- Stability: above 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
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

IPS24060G   BPS24060G

BPS24060G model:
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325x325x80mm.
- Weight (without batteries): 3Kg

IPS24160G - Power supply module @ 4A
BPS24160G - In box power supply module @ 4A

- CPU based power supply
- Input Voltage: 230Vac $\pm$ 15%, 50Hz
- Mains absorption: 0.9A
- Output Voltage: 27.6Vdc
- Maximum: 4Adc
- Stability: above 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
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

IPS24160G   BPS24160G

BPS24140 model features:
- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497x380x87mm
- Weight (without batteries): 6Kg

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

SPS24060G: 24V, 1.5A power supply station with LCD and RS485 connection capability
SPS24160G: 4V, 4A power supply station with LCD and RS485 connection capability
SPS24060S: 4V, 1.5A power supply station with LED status indicators and Inim Loop connection capability
SPS24160S: 4V, 4A power supply module with LED status indicators and Inim Loop connection capability
IPS24060G: 1.5A power supply module
IPS24160G: A power supply module
BPS24060G: In box 1.5A power supply module
BPS24160G: In box 4A power supply module
ProbeTH: Thermal probe

Ancillary devices

The section describes useful ancillary devices for fire detection systems such as: protective enclosures, conduit-to-base adapters, test magnets, etc. Also included are interface boards and stand-alone detectors for residential applications.

Interface boards

Smart420MA - Interface for 4-20mA gas detectors
Interface for 4-20mA gas detectors with 3 relay contacts: Fault Contact (N.C.), Pre-alarm contact (N.O.) and Alarm contact (N.O.). Provides two terminals (OUT) for direct connection to VEGA series input-modules for interfacing gas detectors to the Loops of INIM's Analogue-addressable control panels. Provides two trimmers for fine-adjustments to pre-alarm and alarm thresholds.

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 24 V (selected by means of a jumper). Provides 4 mounting locations, board dimensions 45x35 mm.

STD241201 - 24Vdc/12Vdc step-down switching converter
Converts voltage from 24V down to 14V, suitable for feeding 12V devices (outdoor sounderflashers, diallers, etc.) directly from fire the control panel. Based on switching technology, this highly efficient device produces low heat output.

Accessories items for detectors

EB0030 - Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases. To be installed under the detector base, h 34 mm.

EB0040
Base protected against dripping water when tilted up to 15 degrees max.

EB0040H
2W heater for EB0040 bases.

EB0050
Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry

EB0060
Mounted base with integrate buzzer driven by "R" output.

EB0010SC
Cable-shield plate. Fits to the detector base and allows the junction of cable shields by means of two cable grips.

Accessory items

IL0010
Remote indicator. LED repeater replicates the alarm signal of a detector in alarm status.

IACPP10
Transparent weatherproof cover for manual callpoints, suitable for outdoor applications. The unit fits neatly over the callpoint and is sealed by gaskets which prevent dust, grime and water from coming into contact with the device. Access to the device is gained by simply lifting the cover.

IACPP20
Transparent weatherproof cover for manual callpoints, suitable for outdoor applications. The unit fits neatly over the callpoint and is sealed by gaskets which prevent dust, grime and water from coming into contact with the device. Access to the device is gained by simply lifting the cover. A battery-powered 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 SmartLine panels range. It consists of two L shaped bracket and a front panel metal made.

INPROTCP
Metal protection frame for manual call points.

Connection cables

LINK232F9F9 - Serial cable
RS232 connection cable between a PC and INIM control panels.

LINKUSBAB - USB cable
USB connection cable between a PC and SmartLoop control panels.

LINKUSB232CONV - Cable with RS232
USB conversion adaptor for connections between a PC and INIM control panels.

Probe-TH - Thermal probe
Thermal probe for battery charge optimization.

Accessories for detectors test

SOLO A3 - Tester aerosol for smoke detectors
Tester aerosol for fast functional testing of smoke detectors.
Contains a chemically safe, non-flammable formula for efficient activation of detectors and minimal detector maintenance.

SOLO330 - SOLO A3 aereosol dispenser
Moulded construction houses SOLO A3 aerosol (not included). It has a spring-loaded mechanism for effective aerosol delivery and a clear cup which allows view of the detector LED.
Attachment of a telescopic pole (as seen in photo) extends the reach to 9 meters.

SOLO200 - Detector removal/replacement tool
This no-climb tool makes detector maintenance simple. The grips twist into place to create different size combinations for trouble-free access to the majority of detectors.
Attachment of a telescopic pole extends the reach to 9 meters.

SOLO461 - Cordless heat detector tester
Battery operated tool for functional testing of heat detectors. Provides efficient activation of detectors by blowing heated air directly at the detector sensor.
Attachment of a telescopic pole extends the reach to 9 meters.

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°1 200-001 tool for the removal of detectors from bases
n°1 610-001 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.

SOLO100 - Telescopic pole: 4.5 m
Extends from 1.26m to 4.5 m by means of 4 easy-lock telescopic sections.
This tool extends the reach to 6m and can be further extended to 9m by attaching 3 SOLO 101 poles.

SOLO101 - Single pole
This tool is 1.13 m long and is ideal for reaching detectors mounted no higher than 2.5m or for extending the SOLO 100 telescopic pole.

SOLO108 - Telescopic pole: 2.5 m
Extends from 1.26m to 2.5 m by means of 2 easy-lock telescopic sections.
This tool extends the reach to 4m and can be further extended by attaching a SOLO 101 pole.

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. Other classic applications are hotel receptions, congress centres, shopping malls and all places where the constant supervision of a fire/security system requires operators to provide prompt response to alarm events. Its flexibility allows it to supervise analogue addressable control panels from the SmartLoop series, and 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 SmartLoop and SmartLine series.
The SmartLook supervisory software uses graphic maps connected together in a 'tree' structure. Each map accepts an arbitrary number of objects. The objects can be supervised elements (detectors, partitions, zones, outputs, etc.), a connection to another map, a connection to a web page (VCR web interface) or a command button with access level control. The operator can interact with the system in real-time. In this way, it is possible to control the status of the inputs, activate the outputs and implement operations such as: arm, disarm, bypass, output activation, etc. The SmartLook software integrates video capabilities and consents to the incorporation of cameras and DVRs with IP network web interfaces.
The 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 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.

Minimum hardware requirements	- Pentium 4 processor (3.2 GHz) - RAM 2 GB - Sound board
Operative system superior	- Windows 2000 Professional with Microsoft Data Access Component (MDAC) 2.8 or - Windows XP, XP64 - Windows Vista, Vista 64 - Windows Seven, Seven 64 - Windows 8 (32 and 64 bit), 8.1 (32 and 64 bit)
Necessary disk space	500 MB
Maximum number of supervised control panels	25
Supervision Interface	RS232, Ethernet
Access levels	Standard User, Supervisor User, Administrator User
Supported video resolutions	800x600, 960x600, 1024x600, 1024x640, 1024x768, 1152x964, 1280x720, 1280x768, 1280x800, 1280x960, 1280x1024

ORDER CODES

SmartLook/F01L: fire Licence – Licence for the management of one SmartLoop or SmartLine fire detection control panel. Non-Expandable.
SmartLook/F01E: licence for the management of one SmartLoop or SmartLine fire detection control panel. Expandable Licence.
SmartLook/F02E: licence for the management of two SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/F05E: licence for the management of five SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/F10E: licence for the management of ten SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/I01L: "lite" Intrusion Licence - Licence for the management of one SmartLiving intrusion control panel. Non-Expandable Licence.
SmartLook/I01E: licence for the management of one SmartLiving intrusion control panel. Expandable Licence.
SmartLook/I02E: licence for the management of two SmartLiving intrusion control panels. Expandable Licence.
SmartLook/I05E: licence for the management of five SmartLiving intrusion control panels. Expandable Licence.
SmartLook/I10E: licence for the management of 10 SmartLiving intrusion control panels. Expandable Licence.

* Microsoft® and Windows® are registered trademarks of Microsoft Corporation.

SmartLeague
Programming and management software for INIM devices.

Each application contained in the SmartLeague package is distinct, however, all the applications share the same operational structure and interfaces. The applications allow management of fire control panels from the SmartLine, SmartLight and SmartLoop series, intrusion control panels from the SmartLiving series and GSM dialers from the SmartLink series.
So you will find everything you need for the system programming process in a single package.
The system programming and start-up phases take up a large part of the installer's time at the installation site. So, ever more frequently nowadays, installers are opting for computer-assisted programming methods. With this in mind, INIM's R & D professionals set out to create a software programme that would greatly simplify system programming and diagnostics. This was achieved by adopting a "visual" approach to these tasks. In fact, in addition to having "classic" programming grids, this new software also offers click-on thumbnails which provide you with pop-up menus and helpful prompts.
Furthermore during the system programming process, you will have the help of the device instructions, which can be consulted by clicking on the wiring diagrams on the display.
The programming process is further simplified by a powerful copy & paste option. This option is useful when you are dealing with a large number of elements (zones, devices, events, timers, etc.) of the same type. In such cases, all you need to do is configure one element and then copy its profile onto all the others, thus saving you a considerable amount of time. SmartLeague really makes a difference when it comes to diagnostics. It provides a clear, interactive view of the status of the system.
When you use SmartLeague software to carry out diagnostics on a INIM fire detection system, you have access to the system status in full detail. In this way, you can check the status of the detectors, zones, timers, devices and all the system elements.
The level of detail allows you to check the smoke and temperature of each specific detector.
SmartLeague also is suitable for more complex structures which require data import and export functions, either for easy transfer of data between computers or to manage different operator access levels. For this purpose, SmartLeague has integrated powerful data management and access-control tools. The software is open to all communication channels. SmartLeague is not limited to the management of a local USB or RS232 interface, it also allows programming and control operations via the Internet through a SmartLAN series network board.
The software can be downloaded, free of charge, at www.inim.biz.

EITK1000-ToolKit
Tool for configuration, maintenance and diagnostics

Front view of driver — Rear view of driver — EITK100 ToolKit

The EITK1000 kit comprises an EDRV1000 driver and FireGenius software. The kit allows you to take full advantage of all the unique features of the LoopMap technology integrated into ENEA series detectors and the Versa++ technology integrated into IRIS and ENEA series detectors. By connecting the EDRV1000 driver to a loop consisting of ENEA series devices and interfacing with a PC running FireGenius, you will be able to apply the LoopMap technology and reconstruct a diagram of the loop wiring.
The various devices connected to the loop are identified by their distinct serial numbers and types.
The FireGenius software application (included in EITK1000 kit) is also capable of reconstructing the wiring order along the cable and of identifying and tracing eventual "T" junctions. The FireGenius software application presents the wiring in graphic form. By clicking on the system elements, you will be able to ascertain the device status (for example, smoke level) and interact with the device in real-time (for example, activate a LED or output).
The EITK1000 kit allows you to take full advantage of all the unique features of the Versa++ technology and makes it possible to configure each IRIS or ENEA series detector to suit its specific environment. The EITK1000 kit also permits you to connect directly to the detector line for a complete diagnosis of each device and thus test its operating capacity, verify its real-time values, read the contamination level in the optical smoke chamber and change its sensitivity and operating mode. It also allows you to access the non-volatile memory of each detector and read the course of the temperature levels measured in the period prior to the last alarm detected. This tool not only provides accurate diagnostics, by locating the exact position of cable interruptions and short circuits, but also allows you to measure eventual current dispersion to earth and carry out loop tests by monitoring the number of detected communication errors and anomalies. The software application allows you to configure a loop, save the configuration profiles and import them from the control-panel configuration software and print out the system configuration and test reports.
The EDRV1000 driver (included in EITK1000 kit) is capable of operating autonomously by way of its internal battery, keypad and display. When the EDRV1000 driver is connected to a PC, it is powered through the USB port, in which case, it is possible to make full use of the FireGenius software application. Through its intuitive graphic interface, FireGenius allows you to interact with the detectors, configure them, view their status and check the course of their real-time smoke/temperature levels.
The EITK1000 is the professional tool which will make the installer's life a whole lot easier when it comes to system maintenance.
The EITK1000 comes with a 24Vdc power supply, essential cables and software application CD, all contained in a handy pouch.

Smoke and temperature graph — Loop configuration

ORDER CODES

EITK1000: kit for the configuration, maintenance and diagnostics of systems made up of IRIS and ENEA series devices.
The kit includes: EITK-DRV, EITK-BASE, EITK-PWSP.
EITK-DRV: driver for zones made up of IRIS series devices or loops with ENEA series devices.
EITK-BASE: base for IRIS and ENEA series detectors.
EITK-PWSP: power supply for the EITKDRV driver.

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