

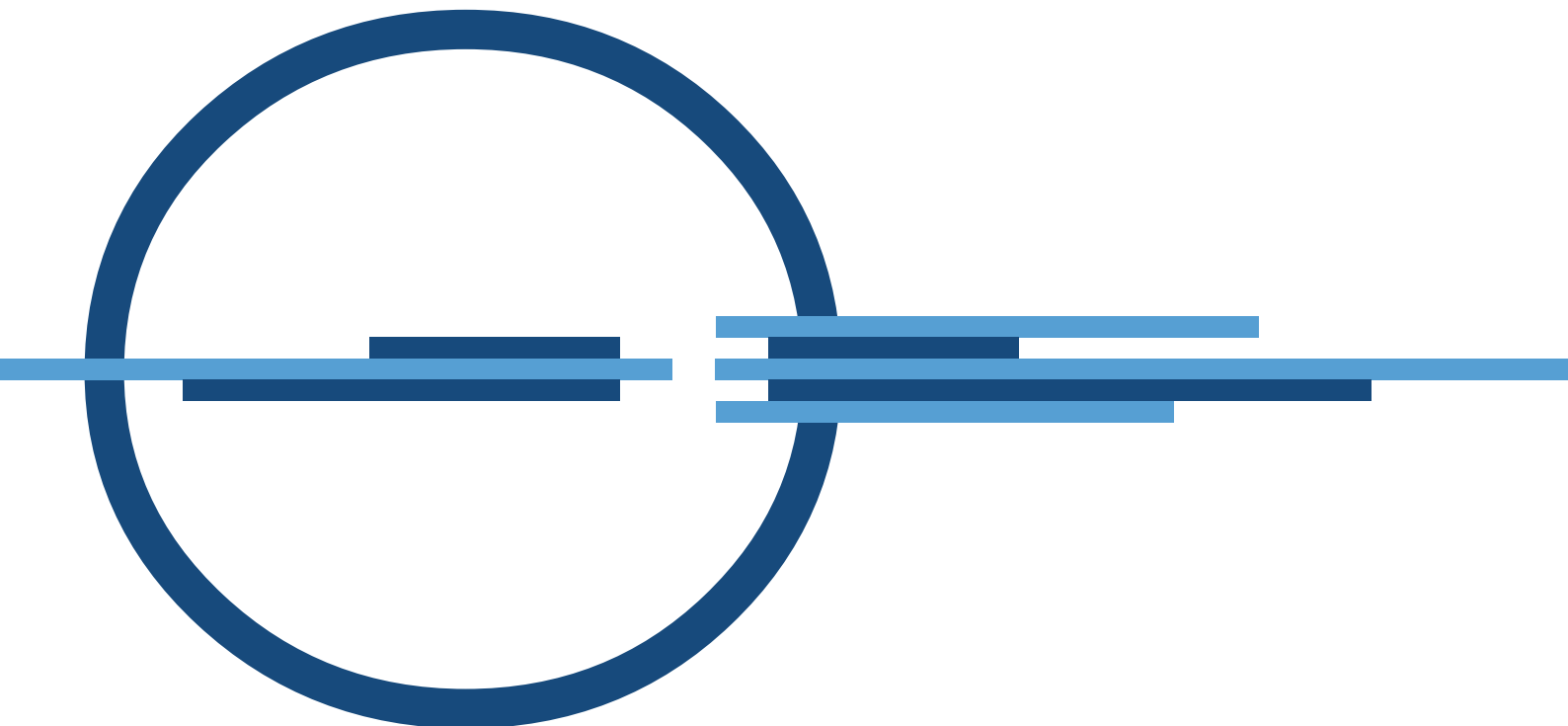
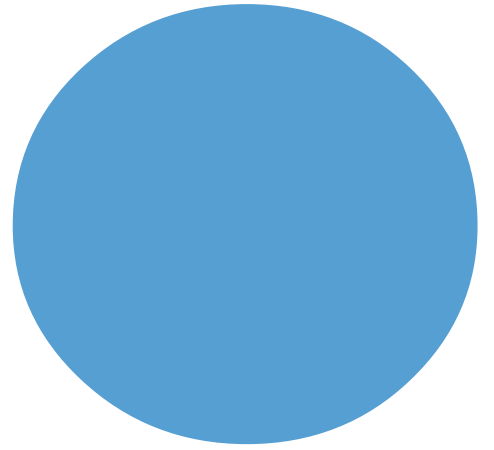
GameOver

Fire alarm and extinguishing  
systems \_ General Catalogue

**FEESEF**<sup>®</sup>

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

**GAME OVER**



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## Made in FeelSef. Made in Italy.

Delivering excellence in security means being ahead of time.

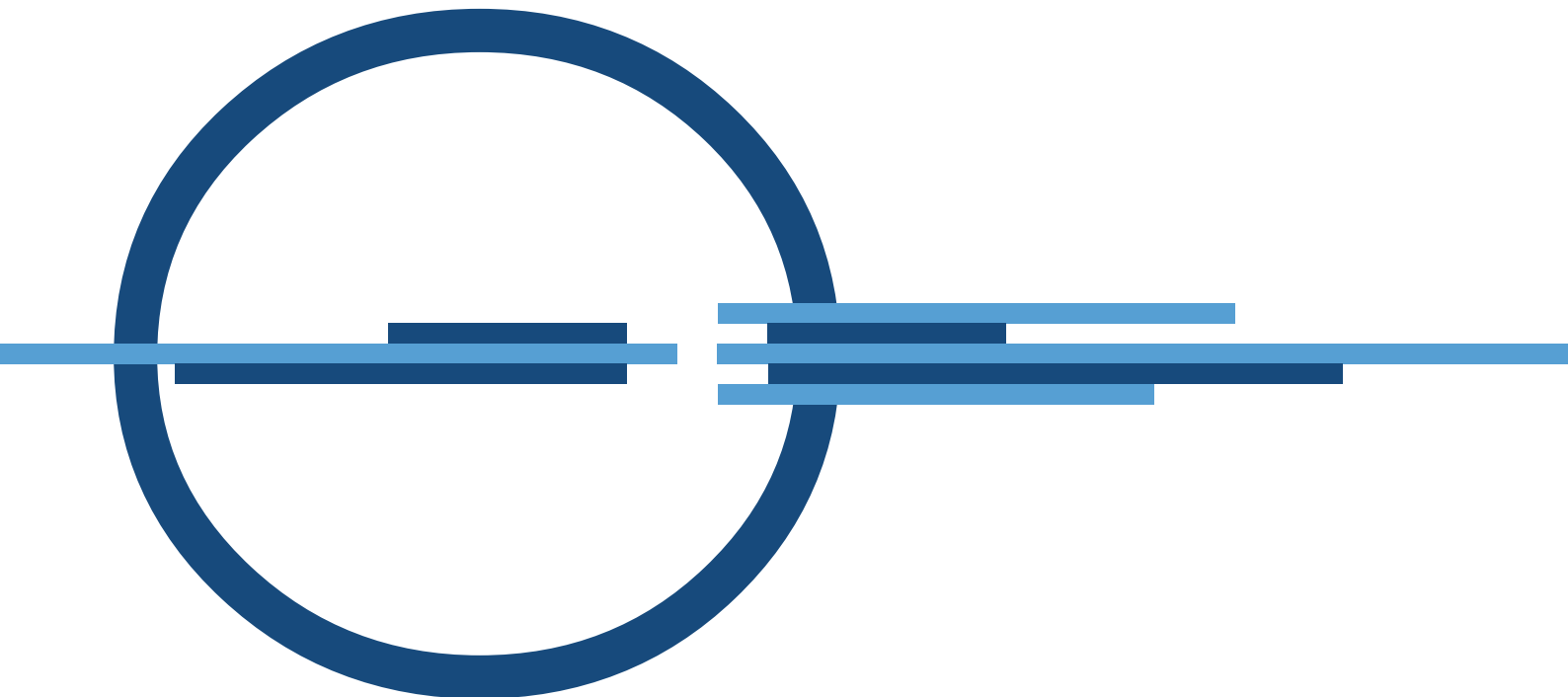
FeelSef innovates! FeelSef designs *advanced, flexible technologies with an easy edge* that installer companies and end users will appreciate.

From design to production, from testing to marketing, quality is our reference line.

FeelSef product is made in Italy.

A team with over 20 years of experience yet *only one desire: your security.*





## Technologies

FeelSef is continuously active in the search for forward thinking solutions to the everyday challenges faced by installer companies. In pursuance of this quest, FeelSef'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 FeelSef 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 FeelSef's laboratories and catch sight of the future of fire detection, today as all products certified by original manufacture to meet the highest European standards..

### **Emergency54<sup>®</sup>**

#### **Emergency54**

When an FeelSef 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 SafeLoopPSTN 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<sup>®</sup>**

#### **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<sup>®</sup>**

#### **Janus**

Janus technology is truly astounding. This technology is embedded in SafeLAN board. By accessorizing the control panel with a SafeLAN board, users will be allowed "no-risk" worldwide access to the system via Internet.

If the SafeLAN 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 SafeLAN as the system gateway.

As well as providing easy remote access, the SafeLAN 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 FeelSef Electronics. This breakthrough technology allows FeelSef panels to accommodate 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). FeelSef'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 FeelSef's



### Versa++

FeelSef 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.

## SafeLine

Conventional control panels with 2 zones or 4 zones expandable to 36



The SafeLine conventional fire-detection control panel series offers a 2 zone non-expandable model (SafeLine020-2), a 4 zone model expandable to 20 zones (SafeLine020-4) and a 4 zone model expandable to 36 zones (SafeLine036).

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.

SafeLine 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 (SafeLetUSee/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 SafeLeague software application. This intuitive programming software greatly simplifies the programming procedure. The SafeLAN/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 SafeLook graphic maps.



## Accessory items



### SafeLine/8Z

8 zone expansion board equipped with an additional supervised output.



### SafeLetUSee/LCD-Lite

Remote repeater panel with display and keypad for user operations.



### SafeLAN/485

Ethernet connection board. Allows the control panel to connect to an Ethernet network for remote for programming and monitoring via the Internet using SafeLook graphic maps.



### SafeLetLoose/ONE

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



### SafeLevel

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 SafeLetLoose/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 (SafeLevel)
- 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 @ 276Vdc (for SafeLine020) or 4A @ 276Vdc (for SafeLine036)
- Battery housing for two 7Ah - 12V batteries (for SafeLine020) or two 17Ah - 12V batteries (for SafeLine036)
- Dimensions (HxWxD for SafeLine020): 325x325x80mm - (HxWxD for SafeLine036): 497x380x87mm
- Weight (without batteries): SafeLine020 = 3Kg; SafeLine036 = 6Kg

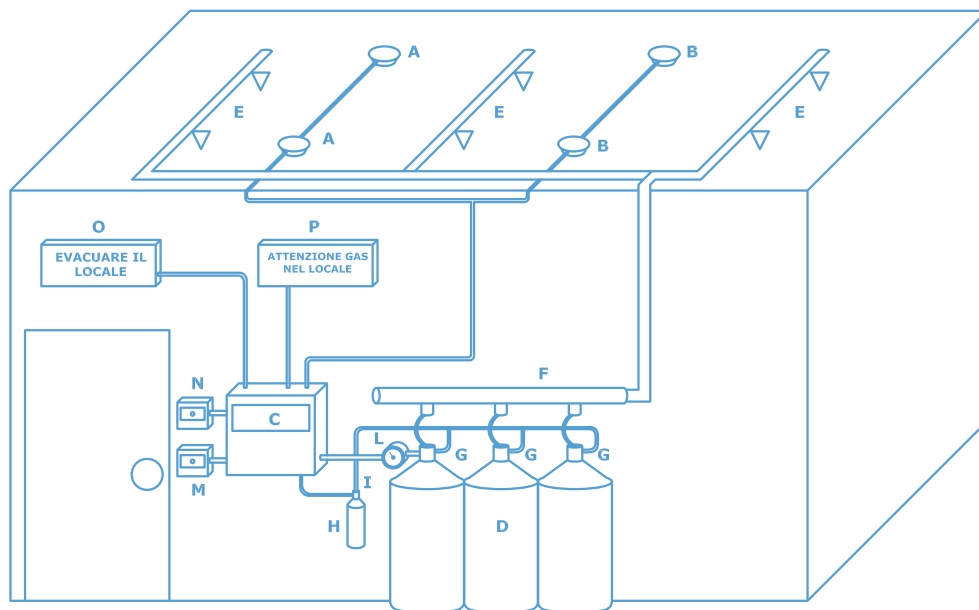
## Fire extinction

Addition of a SafeLetLoose/ONE fire extinction board to any SafeLine series fire control panel provides the system with GAS extinguisher/control capabilities in compliance with EN12094-1.

SafeLetLoose/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"). SafeLine fire extinction control panels can operate autonomously or can interface with addressable analogue control panels from the SafeLoop 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: SafeLine fire extinction control panel.
- D: gas extinguisher cylinders.
- E: gas release nozzles
- 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

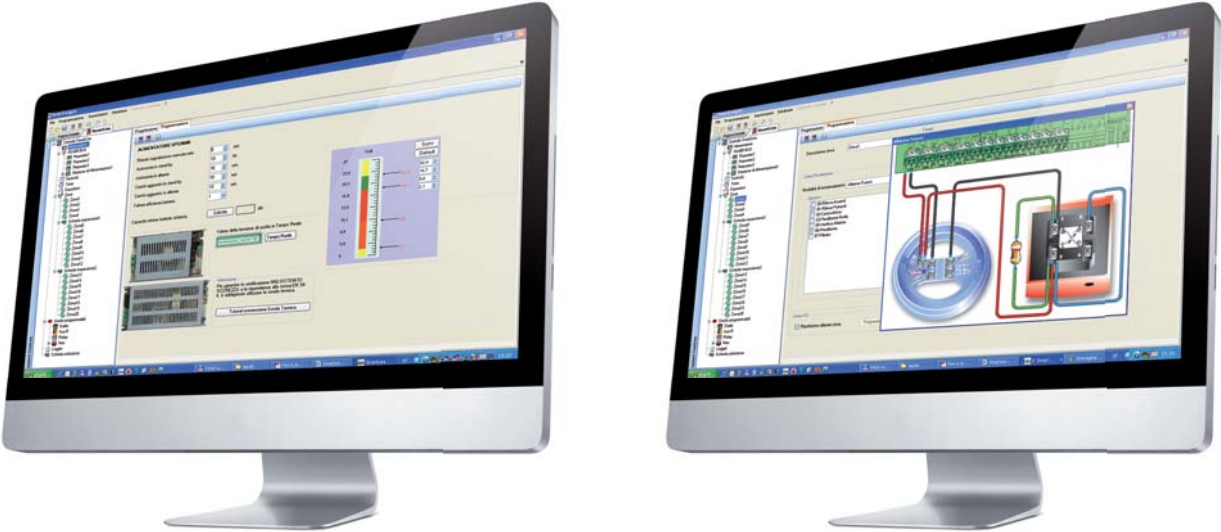
- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Indicator LEDs (status, disabled, faults)
- Supervised terminals for manual fire extinction commands
- Supervised terminals for STOP fire extinction commands
- Supervised terminals for pressure switch control
- Supervised output for fire suppression system activation
- Supervised output for signaling activation (pre-extinguish)
- Supervised output for "Gas in area" signaling

## ORDER CODES

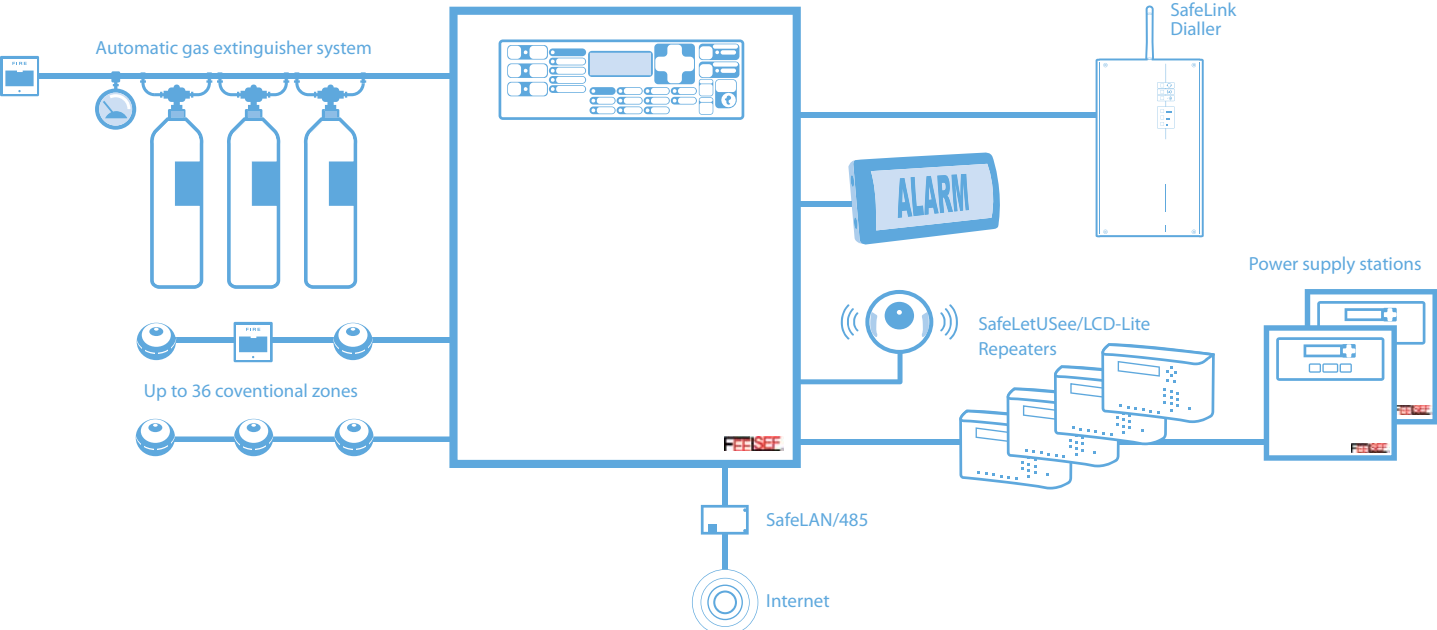
- SafeLine020-2**: non-expandable 2 zone conventional control panel
- SafeLine020-4**: conventional control panel with 4 zones expandable to 20
- SafeLine036**: conventional control panel with 4 zones expandable to 36
- SafeLine/8Z**: 8 zone expansion board
- SafeLAN/485**: ethernet connection board
- SafeLetLoose/ONE**: fire suppression board
- SafeLetUSee/LCD-Lite**: remote-control repeater panel for SafeLine and SafeLight control panels
- SafeLeague**: programming and management software
- Link232F9F9**: RS232 cable link between PC and FeelSef devices
- IPS24040**: switching power supply/battery charger 1.4A@27.6Vdc
- IPS24140**: switching power supply/battery charger 4A@27.6Vdc
- ProbeTH**: thermal probe for optimized battery charge

### Programming software

The SafeLeague programming and management software is intuitive and simple to use. This indispensable tool allows security professionals to control FeelSef 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



## Iris

Conventional detectors

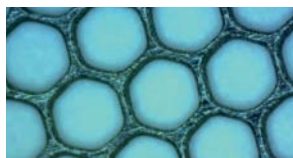


Iris series detectors maintain the ease-of-use of conventional detectors, yet are capable of providing a series of technical solutions that until today were provided by only the most sophisticated addressable analogue systems.

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

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	

## ID100 Optical smoke detector



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



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



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

## 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

Relay 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.



## IC0010 Manual callpoint

- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag confirms activation
- No broken glass.



## IC0010E Manual callpoint for door installation

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

**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

## SafeLight

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 SafeLight 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, SafeLight is a valid alternative to conventional systems.

The SafeLight control panel is based on OpenLoop technology. Thanks to the many protocols supported by its detection Loop, SafeLight 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.

SafeLight 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.

SafeLight manages an RS485 BUS for remote connections.

The BUS supports 4 remote repeater panels (SafeLetUSee/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 FeelSef'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



### SafeLetUSee/LCD-Lite

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



### SafeLetLoose/ONE

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



### SafeLevel

Power-supply station. Connectable to the RS485 BUS (for supervision and management of the control panel power-supply-station outputs. Refer to "Power-supply stations" section 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 SafeLetLoose/ONE Fire Extinction board (EN12094-1 compliant accessory item)
- Supports 4 remote repeater panels
- Supports 2 power-supply stations (SafeLevel)
- 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 (SafeLevel) 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

# SafeLight analog-addressable control panels



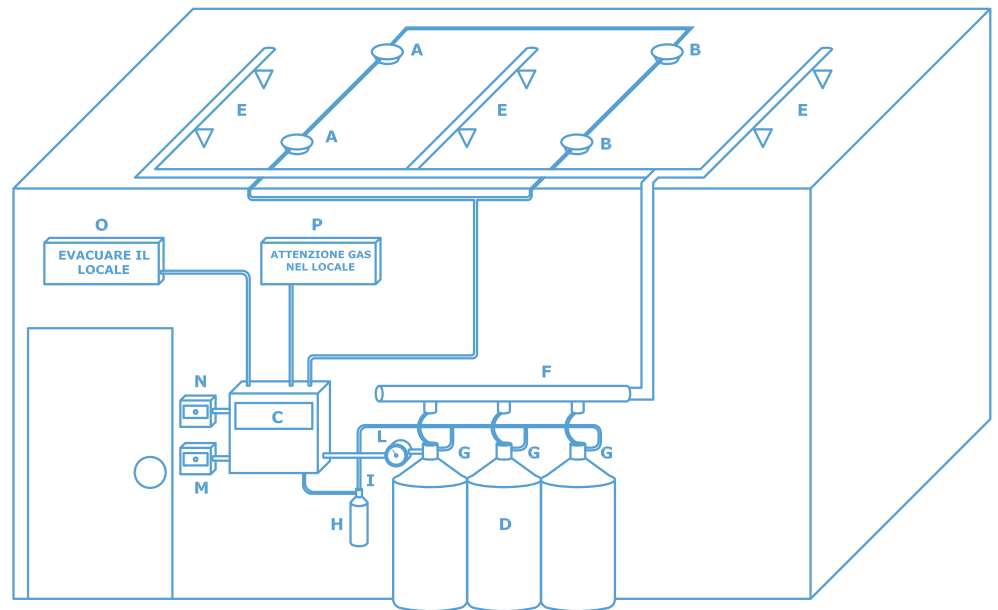
EN 54-2  
EN 54-7  
EN 12094-1

## Fire extinction

Addition of a SafeLetLoose/ONE fire extinction board to any SafeLight series fire control panel provides the system with GAS extinguisher control capabilities in compliance with EN12094-1. SafeLetLoose/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: SafeLight fire extinction control panel.
- D: gas extinguisher cylinders
- E: gas release nozzles
- 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

**SafeLight/G**: single loop analog-addressable control panel. Up to 240 devices over the loop and 30 zones

**SafeLight/S**: single loop analog-addressable control panel. Up to 64 devices over the loop and 16 zones

**SafeLetLoose/ONE**: expansion board

**SafeLetUSee/LCD-Lite**: remote-control repeater panel for SafeLine and SafeLight control panels

**SafeLeague**: programming and management software

**Link232F9F9**: RS232 cable link between PC and FeelSef devices

**IPS24040**: switching power supply/battery charger 1.4A@27.6Vdc

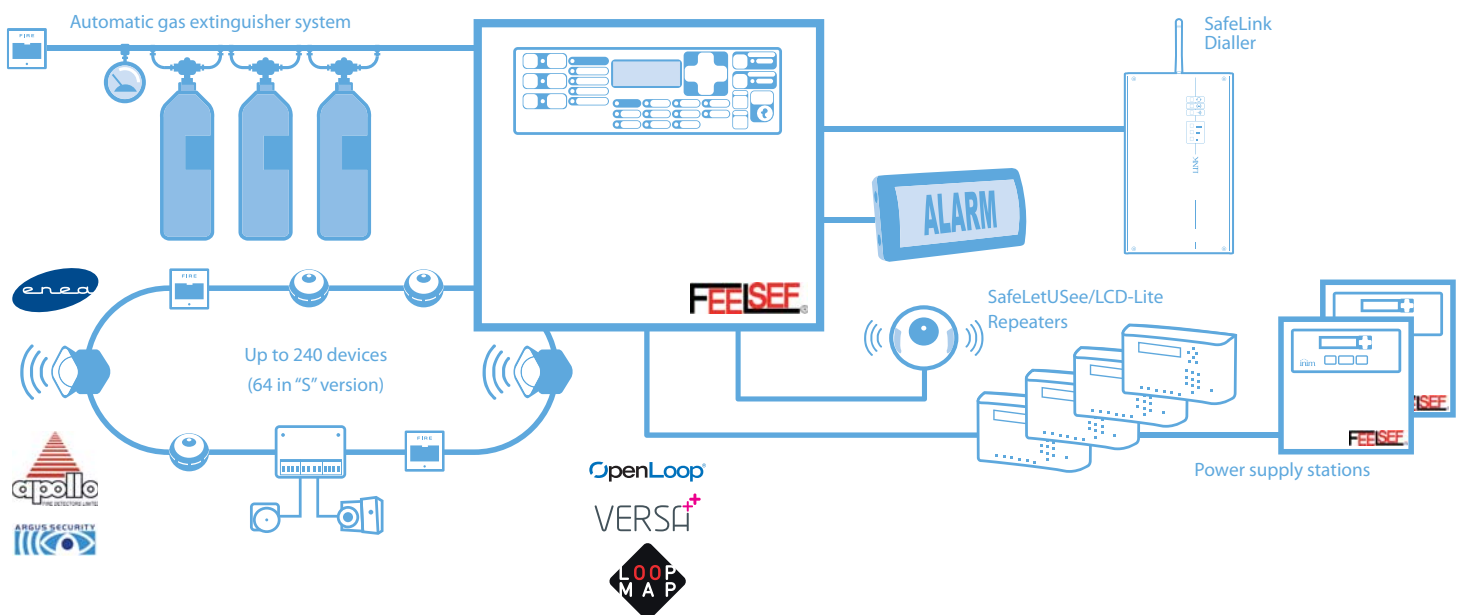
**ProbeTH**: thermal probe for optimized battery charge

## Programming software

The SafeLeague programming and management software is intuitive and simple to use. This indispensable tool allows security professionals to control FeelSeF 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.



## Alkalmazási ábra



## SafeLoop

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



SafeLoop-P



SafeLoop-G



SafeLoop-S

The SafeLoop 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 SafeLoop 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 SafeLoop series has achieved excellence in application flexibility.

The SafeLoop series has been specially designed to provide enhanced features, best-in-class performance, simple end-user operation and trouble-free installation, all with the aim of helping the installer company to improve efficiency.

These first-rate features have been made possible by the appliance of multiprocessor architecture with self-diagnosis features 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 SafeLoop 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 SafeLoop 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 SafeLoopINOUT expansion board. Each of the SafeLoopINOUT 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 FeelSef. 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 SafeLoop system provides an RS485 BUS for remote-control Repeater panel connections. Two Repeater models are available: SafeLetUSee/LCD with display; SafeLetUSee/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: SafeLine020-2EXT (sigle channel);



SafeLine036-4EXT (single channel). These fire extinction control panels are conventional panels from the SafeLine series and are equipped with a SafeLetLoose/ONE fire extinction board. All the control panels from the SafeLoop series support the SafeLoop/PSTN board which provides voice and digital dialer 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 SafeLeague 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 SafeLAN enhanced systems). The SafeLeague'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 SafeLoop 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

**SafeLoop/1010-P:** Control panel with 1 loop, non-expandable, equipped with keypad, display and status LEDs. This model can be enhanced with a SafeLoop/PRN thermal printer

**SafeLoop/2080-P:** Control panel with 2 loops expandable to 8, equipped with keypad, display and status LEDs. This model can be enhanced with a SafeLoop/PRN thermal printer

**SafeLoop/1010-G:** Control panel with 1 loop, non-expandable, equipped with keypad and display

**SafeLoop/2080-G:** Control panel with 2 loops expandable to 8, equipped with keypad and display

**SafeLoop/1010-S:** Control panel with 1 loop, non-expandable, unequipped flush front

**SafeLoop/2080-S:** Control panel with 2 loops expandable to 8, unequipped flush front

## 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 SafeLoop 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 SafeLoop/NET board (accessory item)
- Easy remote access through SafeLAN 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 (SafeLetUSee/LCD and SafeLetUSee/LED)
- Manages SafeLine020-4EXT and SafeLine036-4EXT 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 SafeLoop/INOUT board)
- Emergency phone call (through SafeLoop/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

## SafeLoop system enhancement devices connectable on the RS485 BUS



### SafeLetUSee/LCD – SafeLetUSee/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 SafeLoop 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.



### SafeLetUSee/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 SafeLoop 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.



### SafeLetUSee/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 SafeLetUSee/LCD Repeater panel by means of a flat cable (included) and together they provide maximum system control and visualization capacities.



### SafeMimic – 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 SafeLoop control panel and provides 48 connections for the LED wires.

## SafeLoop system enhancement devices connectable on the SafeLoop motherboard



### SafeLoop/2L – OpenLoop expansion board

SafeLoop/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 accommodate loop expansion boards.



### SafeLoop/INOUT – Input and output expansion board

SafeLoop/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.





### SafeLoop/NET – SafeLoop HorNet network board

The SafeLoop/NET board allows the control panel to be configured in a SafeLoop 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).



### SafeLoop/PSTN – PSTN Voice and digital dialler

The SafeLoop/PSTN board allows the SafeLoop 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.



### SafeLAN – Ethernet interface for Internet via TCP-IP and UDP

The SafeLoop/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.



### SafeLAN/SF – Ethernet interface for Internet via TCP-IP

The SafeLAN/SF 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 also allows remote upload/download operations and allows the monitoring of the system by the SafeLook FeelSef software.



### SafeLoop/PRN – On-front Printer Module

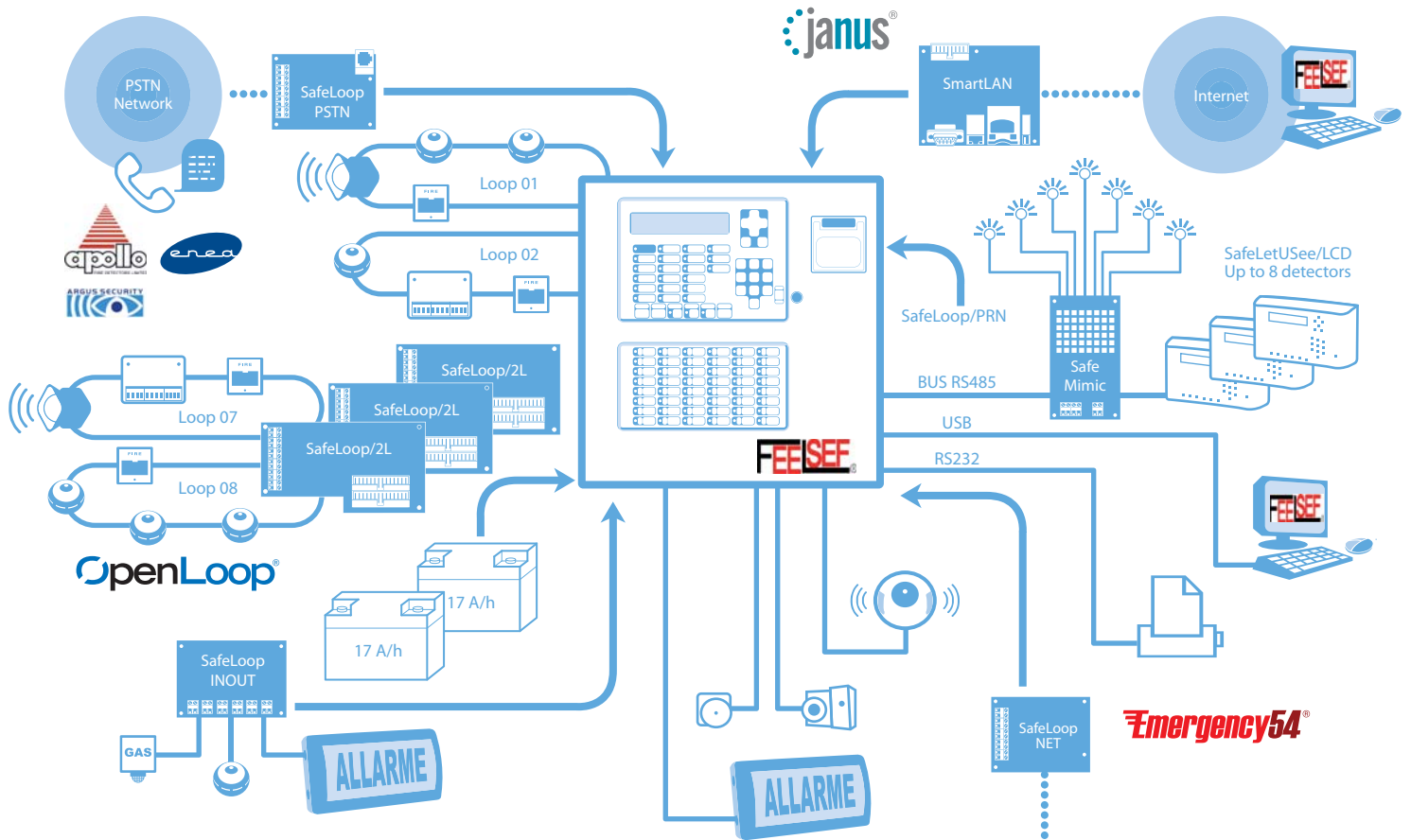
The SafeLoop/PRN thermal printer module can be mounted to the front of the control panel. It can be connected directly to the mother board by means of the connection cable (included in the package). It uses 82mm thermal roll paper and provides a continuous real-time printout of events and/or date to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

The SafeLoop/PRN can be mounted to SafeLoop1010P and SafeLoop2080P models only.

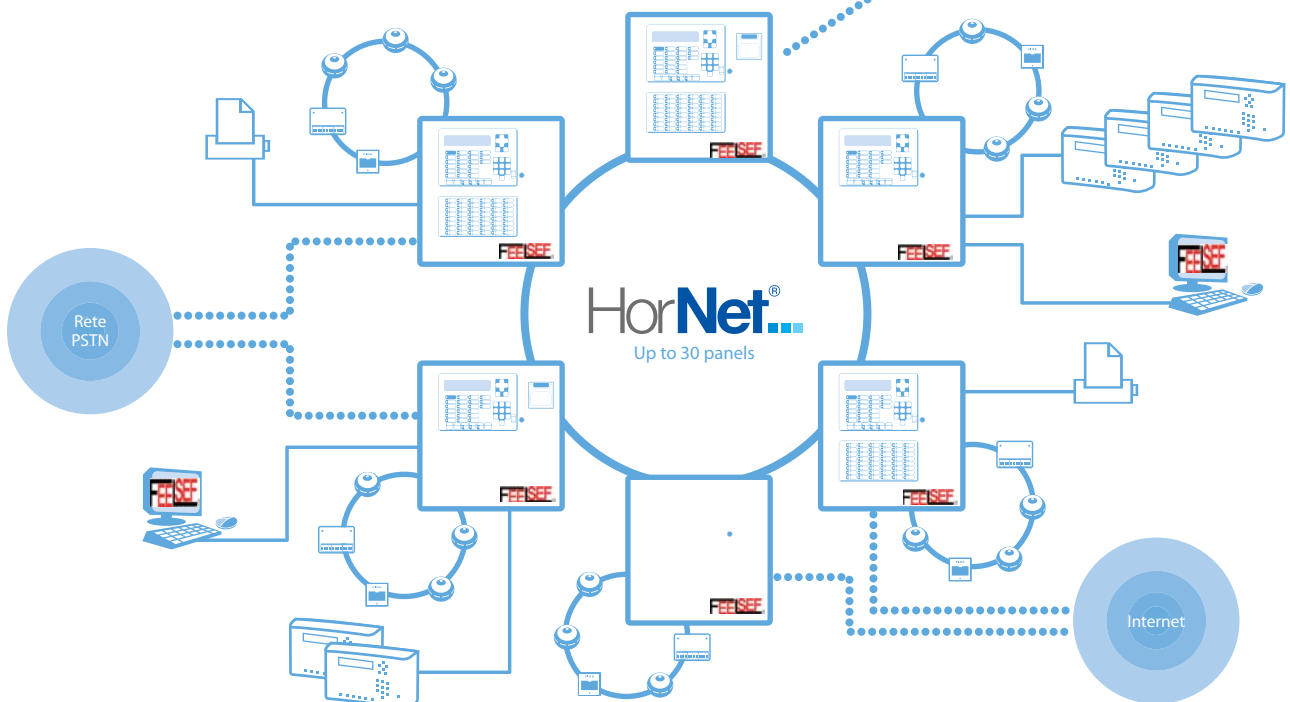
Control Panel Models	By design		Optional attachment boards					
	Keypad and Display	48 Status LED board	SafeLoop 2L	SafeLoop PRN	SafeLoop INOUT	SafeLoop NET	SafeLoop PSTN	SafeLAN SafeLAN/SF
SafeLoop/1010 - P	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
SafeLoop/2080 - P	Yes	Yes	Yes (Max 3)	Yes	Yes	Yes	Yes	Yes
SafeLoop/1010 - G	Yes	-	-	-	Yes	Yes	Yes	Yes
SafeLoop/2080 - G	Yes	-	Yes (Max 3)	-	Yes	Yes	Yes	Yes
SafeLoop/1010 - S	-	-	-	-	Yes	Yes	Yes	Yes
SafeLoop/2080 - S	-	-	Yes (Max 3)	-	Yes	Yes	Yes	Yes

# SafeLoop Addressable analogue detection

SafeLoop Panel overview



SafeLoop 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

SafeLoop/2L	stby:20mA MAX:70mA
SafeLoop/INOUT	stby:40mA MAX:300mA
SafeLoop/NET	stby:40mA MAX:40mA
SafeLoop/PSTN	stby:20mA MAX:60mA
SafeLAN	stby:200mA MAX:200mA
SafeLAN/SF	stby:40mA MAX:40mA
SafeMimic	stby: 5mA MAX:50mA
SafeLoop/LED	stby:40mA MAX:80mA
SafeLoop/PRN	stby:0 MAX:1A
SafeLetUSeep/LCD	stby: 40mA MAX:50mA
SafeLetUSeep/LED	stby: 5mA MAX:50mA

## ORDER CODES

**SafeLoop/1010-P:** control panel with 1 loop, non-expandable, equipped with command keypad, display, status LEDs and housing for SafeLoop/PRN printer (accessory item)

**SafeLoop/2080-P:** control panel with 2 loops expandable to 8, equipped with command keypad, display, status LEDs and housing for SafeLoop/PRN printer (accessory item)

**SafeLoop/1010-G:** control panel with 1 loop, non-expandable, equipped with command keypad and display

**SafeLoop/2080-G:** control panel with 2 loops expandable to 8, equipped with command keypad and display

**SafeLoop/1010-S:** control panel with 1 loop, non-expandable, with unequipped flush front

**SafeLoop/2080-S:** control panel with 2 loops expandable to 8, with unequipped flush front

**SafeLetUSee/LCD:** remote LCD repeater panel

**SafeLetUSee/LCD-RK:** Remote LCD Repeater panel – 19" Rack Mount

**SafeLetUSee/LED:** Remote LED Repeater panel

**SafeLoop/2L:** OpenLoop expansion board

**SafeLoop/INOUT:** Input and output expansion board

**SafeLoop/NET:** Board for the connection of SafeLoop control panels in a Hornet network

**SafeLoop/PSTN:** Landline digital and voice dialler board

**SafeLoop/PRN:** Thermal printer module

**SafeLAN:** Ethernet interface for Internet connections over TCP-IP and remote programming and supervision

**SafeLAN/SF:** Ethernet interface for Internet connections over TCP-IP

**SafeMimic:** Synoptic board

**SafeLine020-4EXT:** Single-channel fire suppression control panel with 4 conventional zones expandable to 20

**SafeLine036-4EXT:** Single-channel fire suppression control panel with 4 conventional zones expandable to 39

**SafeLeague:** Programming and management software for FeelSef products runs under Windows

**Link232F9F9:** RS232 cable link between PC and FeelSef devices

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

**SPS24040:** Switching power supply/battery charger 24V 1.4A

**SPS24140:** Switching power supply/battery charger 24V 4A

# SafeLoop Addressable analogue detection



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

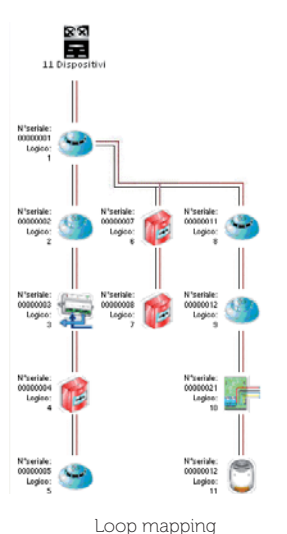


## Addressable analogue detector

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 FeelSef's R&D professionals, which ensure unequalled reliability and the highest immunity to false alarms. Thanks to FeelSef'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



- 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



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



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



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

Relay base with a single relay fully programmable.



## 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.



# Modules

## EM312SR Input output module



The EM312SR connects directly to the loop and is equipped with a supervised input (capable of controlling the status of external devices), a supervised output (capable of driving of one or more audible/visual signalling devices) and a voltage free output (capable of driving all types of external devices, for example, electromagnets, etc).

- 1 supervised input
- 1 supervised output
- 1 supervised input for 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

The EM411R zone interface connects directly to the loop and allows conventional zones (maximum 32 devices) to be interfaced to FeelSef'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



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 and conventional line interface



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)

## EC0010 Manual callpoint

- Addressable callpoint
- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag confirms activation
- No broken glass



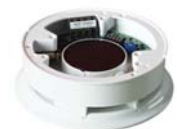
## EC0010E Manual callpoint for outdoor installation (IP67)

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



## ESB010 Sounder base

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)

## 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 Addressable loop-powered sounder unit in red enclosure



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 Addressable loop-powered sounder/beacon unit in red 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

### ES0010WE Addressable loop-powered sounder unit in white enclosure



The loop-powered ES0010BE connects directly to the loop. Weatherproof to IP67, suitable for outdoor installation.

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

### ES0020WE Addressable loop-powered sounder/beacon unit in white enclosure



The loop-powered ES0020BE connects directly to the loop. Weatherproof to IP67, suitable for outdoor installation.

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

### ESS020 Addressable warning sign



The ESS020 comprises an EM312SR module, It must be connected to the loop and to a 24Vdc power source. This device, as well as activating warning signals, provides an input for a conventional alarm callpoint and a relay for the control of an electromagnetic stop. The ESS020 provides a cost-efficient solution for the complete control of a fire exit (REI Door).

Sound output @ 1m	Dimensions	Operating voltage	Current consumption
85dB	365x170x50 mm	11 – 28 Vdc	100 mA



# EITK1000-ToolKit

Tool for configuration, maintenance and diagnostics



Front view of driver



Rear view of driver



EITK1000 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

**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 Construction Products Directive (CPD) by BS.



KM96627

### 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.



KM96626

### 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.



KM96628

### 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



Micromodule

	Wall mounting	Minimodule	DIN rail module	Micromodule
Single supervised input	VMI100	VMMI100	VMDI100	VUMI100
Single supervised output	VMC100	VMMC100	VMDC100	VUMC100
Input/Output Supervised Output	VMIC100	VMMIC100	VMDIC100	-
Input/Output Voltage free relay	VMIC120	VMMIC120	VMDIC120	-
Unsupervised output	VMC120	VMMC120	VMDC120	VUMC140



### 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.



## 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 performance 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.



### **VLBE100** - Addressable Beacon

Low power consumption. Compatible with all analogue addressable fire detection panels. Loop powered. IP65 IP rating.



### **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:** 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:** 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:** 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:** 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.



# Discovery series detectors



**58000-600:** 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:** 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:** 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.



**45681-210:** Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. Equipped with 4 screw terminals for quick, reliable installation. Base supplied with address card.



**45681-242:** Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. The on-board relay provides a NC/NO contact configurable from the control panel. Base supplied with address card.



**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.

## Accessory items

**53832-070:** Remote indicator provides visual signals relating to the status of detectors located in difficult-to-inspect places. Suitable for all types of detectors. Polarity insensitive.



**55000-760:** Single input module for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting and short-circuits on the line. A red LED indicates interface alarm status. Complete with isolator.



**55000-845:** Interface for analogue control panels capable of managing an absorption line for conventional detectors. The interface comes with enclosure and terminal board. Complete with isolator.



**55000-847:** Input/output module suitable for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting and short-circuits on the line. The output line voltage-free contacts (Common; Normally Closed; Normally Open). A red LED indicates interface alarm status. Complete with isolator.





**55000-852:** Supervised single-output module for sounders and bells. The output is monitored for wire-cutting and short-circuits on the line. The load requires an external supplementary power supply. The interface is equipped with a NO/NC fault input for control of the supplementary power supply. A red LED indicates interfac alarm status. Polarity insensitive. Complete with isolator.



**55100-908:** 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:** 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:** 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:** 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.



# Wireless devices Sagittarius

## 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

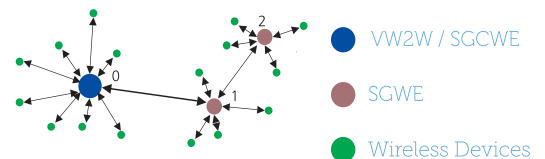
Loop-powered wireless translation device. Processes signals from detectors, modules, callpoints and all wireless devices, then relays the information regarding the devices and its own status to the control panel.

#### 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.



## 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



## Expander Apollo wireless solutions

The hard wiring of a fire detection system is often problematic, but thanks to the Xpander system, it is possible to extend the cover of the system by means of wireless technology.



### **XPAN-IN-14007**

XPANDER transceiver for wireless analogue detectors and interfaces. Connects directly to the control panel loop. Manages 31 addresses (detectors or interfaces). Supplementary power supply not required. The transmission data from the transceiver to the control panel comprises, in addition to the analogue value of the device and its status, also the battery level of the devices and maintenance-requirement status. Operating frequency 868Mhz. Two-way wireless technology.



### **XPAN-CB-12034**

XPANDER wireless analogue optical smoke detector with bayonet fitting for connection to an addressable base containing batteries. Equipped with status signalling LED and a remote output capable of supplying 17 mA maximum. The value of the quantity of smoke in the optical chamber is converted into a digital signal and transmitted to the transceiver for processing and successive transmission to the control panel loop. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.



### **XPAN-CB-11171**

XPANDER wireless analogue heat detector with bayonet fitting for connection to an addressable base containing batteries. Equipped with status signalling LED and a remote output capable of supplying 17 mA maximum. The temperature value is converted into a digital signal and transmitted to the transceiver for processing and successive transmission to the control panel loop. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.



### **XPAN-CB-11170**

XPANDER wireless analogue Rate-of-Rise heat detector with bayonet fitting for connection to an addressable base containing batteries. Equipped with status signalling LED and a remote output capable of supplying 17 mA maximum. The temperature value is converted into a digital signal and transmitted to the transceiver for processing and successive transmission to the control panel loop. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.



### **XPAN-CB-13032**

XPANDER wireless analogue optical smoke and heat detector with bayonet fitting for connection to a base containing batteries. Equipped with status signalling LED and a remote output capable of supplying 17 mA maximum. The values of the smoke and heat sensors are combined to give the final analogue value. The value is then converted into a digital signal and transmitted to the transceiver for processing and successive transmission to the control panel loop. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.



### **XPAN-MC-14006**

XPANDER wireless analogue manual callpoint in red thermoplastic enclosure containing batteries. 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.



### **XPAN-CB-14005**

XPANDER wireless sounder beacon in transparent thermoplastic enclosure containing batteries. Addressable programmed via a DIP switch housed inside the enclosure.



## 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. FeelSef 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.



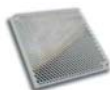
Beam detector



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.

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

### ORDER CODES

**BDH100:** 5m-40m reflective optical beam detector

**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 FeelSef's fire block range of products offers you everything you need to make you air duct system fully fire responsive.



EBDDH



DDH-Cover



DDH-BRKT

### 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

## INE55/ING55

### Gas detectors

The INE55 and ING55 series gas detectors 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 incorporates hazardous, toxic, combustible and explosive gas leak detectors, all available in explosionproof or dustproof enclosures to satisfy even the most exacting requirements. During the installation or maintenance phase, it is possible to configure the device parameters, change the intervention thresholds, verify the gas-level readings or simulate alarm, pre-alarm and fault conditions either via PC (using the adaptor described in this section) or by means of a hand-held programmer.



ING55



INE55

#### ING55 - Detector in IP55 enclosure

IP55 rated gas detector in dustproof metal enclosure.

The sensitive element is located on the underside of the detector and is protected by a stainless steel mesh. The sensor cap can be easily replaced at the end of its functional-life (3 years, in favourable environments with no polluting agents) without dismantling the device.

#### INE55 - Detector in explosionproof enclosure

II 2G Ex IIC T6 ATEX certified gas detector in explosionproof enclosure.

The hazardous-area enclosure (which houses the electronic circuitry) is made from diecast aluminium and is suitable for installation in classified areas. The sensitive element is housed inside a stainless steel AISI Type 303 enclosure or inside a chrome-plated brass enclosure, resined and approved, 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 replaced at the end of its functional life (3 years in favourable environments with no polluting agents) without dismantling the device.

- Open-collector Pre-alarm output - NPN optoisolated
- Open-collector Alarm output - NPN optoisolated
- Open-collector Fault output - NPN N.C. to ground
- Output current draw (pre-alarm 2700 ohm, alarm 1200 ohm to ground)
- Configurable thresholds in L.E.L. 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
- Environment temperature compensation
- On-site sensor cap replacement without test gas cylinders
- Address, thresholds, filters and delays configurable via PC (through INA55-500 interface)
- Address, thresholds, filters and delays configurable via hand-held programmer (INA55-501)
- Ability to display real-time and detected peak readings (via PC interface or hand-held programmer)
- Pre-alarm, alarm and fault condition simulation (via PC interface or hand-held programmer)

Technical features	Serie G55	Serie E55
Sensitive element	Semiconductor	
Power supply voltage	12/24 Vdc	
Standby current consumption	55 mA a 12 V / 28 mA a 24 V	
Pre-alarm current consumption	68 mA a 12 V / 28 mA a 24 V	
Alarm current consumption	80 mA a 12 V / 45 mA a 24 V	
Operating temperature	0 – 40 °C	
MAX. air flow speed	10 m/s	
Weight	370g	1 Kg
Dimensions (HxWxD)	141x100x60mm	170x90x78,50mm

Detector models		Technical specifications	
Serie ING55	Serie INE55	Gas detected	Alarm thresholds
ING55-500	INE55-500	Methane	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-501	INE55-501	Explosive gases (Alcohol E., Alcool M., Ethylene, Pentane, Acetone, etc.)	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-502	INE55-502	Petrol fumes	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-503	INE55-503	Carbon monoxide	Pre-alarm 100 ppm, Alarm 200 ppm
ING55-504	INE55-504	Hydrogen	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-505	INE55-505	GPL	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-506	INE55-506	Propane	Preallarme 15% LIE, Allarme 30% LIE
ING55-507	INE55-507	Ammonia	Pre-alarm 100 ppm, Alarm 200 ppm
ING55-508	INE55-508	Ammonia	Pre-alarm 1000 ppm, Alarm 2000 ppm
ING55-509	INE55-509	Acetylene	Pre-alarm 15% LEL, Alarm 30% LEL
ING55-510		Excess of Oxygen	Pre-alarm 24% LEL, Alarm 27% LEL
ING55-511		Lack of Oxygen	Pre-alarm 18% LEL, Alarm 15% LEL

## Connecting gas detectors to FeelSef fire-detection control panels



### SafeLine - Conventional control panel series

The gas detectors can be connected to the control-panel detection lines by means of the detector terminal board outputs. Attachment of a plug-in 4-20mA board allows the detectors to interface to the control-panel I/O Lines and obtain a proportional reading of the detected GAS level.

The programming flexibility provided by SafeLine control panels allows installers to create event-related activation configurations capable of satisfying the most demanding applications (for example, activation of outputs in accordance with the average values detected by a group of detectors). The intervention threshold of each detector can be programmed directly through the control panel.

### SafeLight / SafeLoop - Analogue control panel series

The INE55 and ING55 series gas detectors can be connected to analogue control panels via an analogue input module, or by means of an INA55-505 plug-in board which allows the detector to be connected directly to the loop.

## Accessory items



INA55-500

### INA55-500 - Gas detector to PC interface

This tool interfaces the gas detector to the PC via RS232 port and allows installers to read and change the detector parameters, and simulate pre-alarm, alarm and fault conditions. Complete with CD containing the respective management software.

### INA55-501 - Hand-held programmer for gas detectors

This tool allows installers to read and change the detector parameters, and simulate pre-alarm, alarm and fault conditions. Ideal for direct intervention.

### INA55-503 - 3 relay board

This tool plugs into the gas detector board and provides 3 free-voltage relays (dry contacts) activated by pre-alarm, alarm and fault conditions.

### INA55-504 - Analogue interface

This tool plugs into the gas detector board and allows the gas detector to connect directly to the detection loop of FeelSef's analogue addressable control panels (Argus protocol configured SafeLoop and SafeLight control panels).

### INA55-505 - Interface to Argus Input module

This tool plugs into the gas detector board and allows the gas detector to connect directly to an Argus series Input module.

### INA55-505I Interface to Enea input module

This tool plugs into the gas detector board and allows the gas detector to connect directly to an Enea series input module.

### INA55-101 - 4-20mA Interface

This tool plugs into the gas detector board and provides a 4-20 mA output current proportional to the value of the detected gas.

### INA55-103 - 1 relay 12/24V Interface

This tool plugs into the gas detector board and transforms one of the detector open-collector outputs into a dry contact.

### INB55 - 1 liter tester cylinders for GAS detectors

Tester for functional testing of smoke detectors, sufficient for approximately 8 tests.

### INA55-104 - 8mm Valve for disposable cylinders

INA55-105 - Cup for G55 gas detectors to be used with 8 mm valve

INA55-106 - Cup for E55 gas detectors to be used with 8



INA55-501



INA55-140



INA55-500

Disposable cylinder	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.

# Aspirating system

## Aspirating Systems

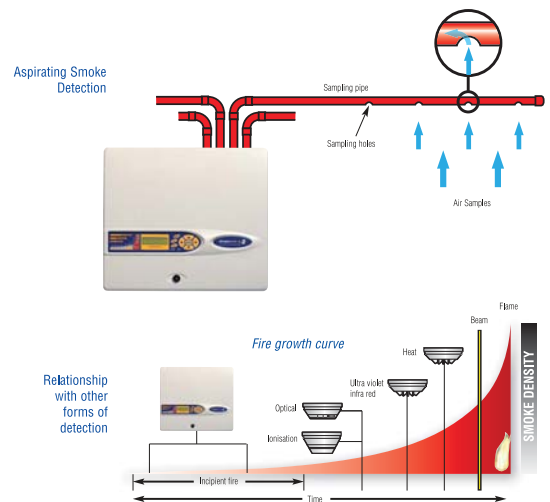
Stratos aspirating systems provide the very earliest warning of fire. They are capable of drawing air through sampling pipes to a three-dimensional laser chamber with a removable filter cartridge. The pipe length can be between 50m to 100m long, depending on the model and the level of sensitivity required. 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.



## 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

## 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 of up to 100m each pipe. 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

Stratos HSSD is capable of drawing air from the protected area through four sampling pipes of up to 100m each pipe. 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: 250m @ 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.

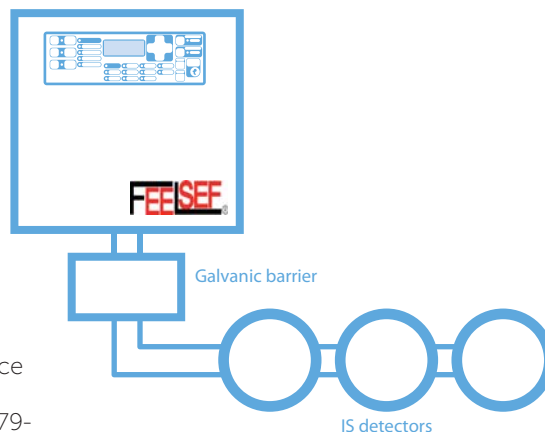
## Sampling pipes

- 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 10909** - 'T' Junction Red.
- CM 10925** - Sample point (flexible tube with sample point).
- CM10954** - Pipe support.
- CM10960** - Labels for holes location (100 pcs).



## Conventional detectors and accessory items Atex Certified

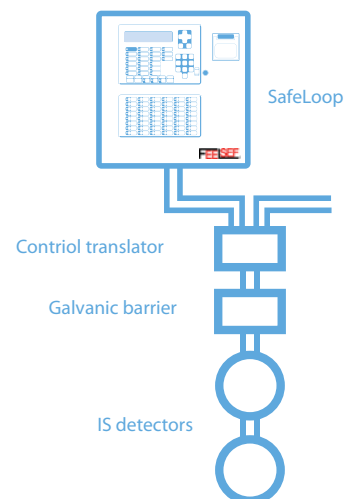
ORBIS IS (Intrinsically Safe) is a range of conventional detectors which have been especially designed and approved for use in inflammable atmospheres. These products are certified BASEEFA (British Approval Service for Electrical Equipment in Flammable Atmospheres) in compliance with BSEN60079-0:2004, 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.



- 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
- 1461Ex** - AATEX Conventional Callpoint
- 29600-378** - Galvanic barrier for conventional detectors – DIN rail moun

## Addressable detectors and Apollo XP95 accessory items Atex Certified

XP95 IS (Intrinsecally 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.



- 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

**17-970392** - 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 explosive 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 linear barrier



**ARDEA Eex S-SF** : Atex Smoke Beam detector.  
 • Barrier TX - RX • Cat. 2GD-EXD IIC T6 • 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 jacket. 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
EPC280	138°C	-40 ÷ +93°C	UL, FM
EPC356	180°C	-40 ÷ +105°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 jacket. 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 jacket. 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 jacket. 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 FeelSef offers in its extensive product line-up.

## Conventional visual/audible signalling devices

**IS0010RE** – Sounder in Red  
**IS0010WE** – Sounder in White

These audible signalling devices operate at 17 to 60 Vdc. Protection rating IP65. 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
Sound output @ 1 m	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)
Protection rating	IP65
Operating voltage	17 – 60 Vdc
Current consumption	From 4 to 41 mA (depending on the selected tone)
Operating temperature	-25°C - +70°C
Wire Entry	2 x 20mm on base
Weight	250g
Dimensions	Ø 98 cm h 104 cm

**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

These audible signalling devices operate at 17 to 60 Vdc. Protection rating IP65. 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
Sound output @ 1 m	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)
Protection rating	IP65
Operating voltage	17 – 60 Vdc
Current consumption Audible section	From 4 to 41 mA (depending on the selected tone)
Current consumption Visual section	5 mA
Operating temperature	-25°C - +70°C
Wire Entry	2 x 20mm on base
Weight	250g
Dimensions	Ø 98 cm h 104 cm

### IS0030RE – High powered sounder

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
Sound output @ 1 m	120 dB(A) configurable
Protection rating	IP66
Operating voltage	10 – 60 Vdc
Current consumption-audible setion	Up to a 500 mA (depending on the selected tone)
Operating temperature	-25°C - +70°C
Weight	1,8Kgg
Dimensions	166 x 150 mm

### ISC010 – 6" bell

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



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

### ISC010E – 6" bell for outdoor use

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



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

## ESB010 – Sounder base

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 95dB(A) (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 – Cover for sounder base/beacon

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 95dB(A) (configurable)	32 selectable	17 – 60 Vdc	8 mA

## ORDER CODES

- IS0010RE:** Sounder in red enclosure
- IS0010WE:** Sounder in white enclosure
- IS0020RE:** Audible/Visual signalling device in red plastic enclosure with red lens
- IS0020WE:** Audible/Visual signalling device in white plastic enclosure with white lens
- ISC010:** 6" bell
- ISC010E:** 6" bell for outdoor installation
- ESB010:** Sounder base
- ESBC010:** Cover for sounder base
- ESB020:** Sounder base and beacon
- ESBC020:** Cover for sounder base/beacon

# Audible/Visual warning signs

## ISS020 – Audible/Visual Warning Sign.

Red audible/visual Fire safety sign  
Available with different alarm indications: FIRE, EVACUATE, etc.



Sound output @ 1m	88 dB(A)
Protection rating	IP54 (suitable for outdoor installation)
Operating voltage	11 – 28 Vdc
Current consumption	100 mA
Operating temperature	-10°C - +50°C
Weight	900g
Dimensions	365 x 170 x 50 mm

**TAO10** – Conventional Audible/Visual Warning Sign

**TAOA10** – Conventional Self-powered Audible/Visual Warning Sign

Super-bright LED technology (using 5 LEDs) provides high efficiency signalling. Available with different alarm indications (to be specified on the purchase order).



Operating voltage	19-30 Vdc
Absorption current	45 mA
Sound output @ 1m	90 dB
Protection rating	IP44
Operating temperature	-10 + 55 °C
Weight	500 g
Dimensions	110 x 285 x 68 mm

**TAOB10** – Two-sided Conventional Audible/Visual Sign.

**TAOAB10** – Two-sided Conventional Audible/Visual Sign - Self-powered.

Two-sided hanging sign with bracket TAO ST01.

5 super-bright LEDs offer maximum light output with reduced current consumption.

Available with different alarm indications (to be specified on the purchase order)



Operating voltage	19-30 Vdc
Absorption current	45 mA
Sound output @ 1m	90 dB
Sound output @ 1m	IP44
Operating temperature	-10 + 55 °C
Weight	500 g
Dimensions	110 x 285 x 68 mm
Battery	4,8v 800mAh

**TAOFLAT** – Ultraflat Audible/Visual Sign

Aesthetically pleasing ultraflat audible/visual sign. Low-profile design and sharp illumination make this sign ideal for places where decor counts. The electrical circuitry is housed in a standard flush-mount backbox (mod.503)



Operating voltage	19-30 Vdc
Absorption corrente	50 mA
Sound output @ 1m	105 dB
Operating temperature	-10 + 55 °C
Dimensions	150 x 300 x 10 mm

**ORDER CODES**

**ISS020:** Conventional Audible/Visual Sign

**TAO10:** Conventional Audible/Visual Sign

**TAOA10:** Conventional Audible/Visual Sign

**TAOB10:** Two-sided Conventional Audible/Visual Sign

**TAOAB10:** Two-sided Conventional Audible/Visual Sign - Self-powered

**TAOFLAT:** Ultraflat Audible/Visual Sign

# Sounders and Flashers

## 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 Safey there is no losing out on performance. Italian quality at the best price.

The Safey is fully microprocessor-controlled to ensure excellence in performance.

Uses piezoelectric sounder and super bright LED-technology flasher.

A direct move towards superior signalling features and low power consumption.

- Piezoelectric sounder
- 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

**Safety-GFR:** Indoor sounder/flasher



## Accessory items for Fire extinction systems

### SafeLetLoose/ONE

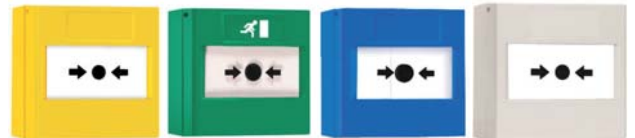
Addition of a SafeLetLoose/ONE fire suppression board to any SafeLine or SafeLight series fire control panel provides the system with GAS suppression control capabilities in compliance with EN12094-1.

SafeLetLoose/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

- IC0010Y** - Conventional Callpoint in yellow enclosure
- IC0010G** - Conventional Callpoint in green enclosure
- IC0010B** - Conventional Callpoint in blue enclosure
- IC0010W** - 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



### TAO10 – Conventional Audible/Visual Warning Sign.

5 super-bright LEDs offer maximum light output with reduced current consumption. Available with different alarm indications (to be specified on the purchase order).



Operating voltage	19-30 Vdc
Current consumption	45 mA
Sound output @ 1m	90 dB
Protection rating	IP44
Operating temperature	-10 + 55 °C
Weight	500 g
Dimensions	110 x 285 x 68 mm
Battery	Battery

## 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
Current consumption	65 mA
Holding force	>55Kg
Base dimensions	65 x 65 x 3mm
Electromagnet diameter	50mm x 39mm

#### DR01830I

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



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

#### DR19001

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



#### DR19002

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

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

#### DR18005

Hold open electromagnets 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
Current consumption	60 mA
Holding force	>55Kg
Base dimensions	90 x 75 x 35mm

**DR01805Z**

Swivel counterplate with base in zinc plated steel for DR1901, DR1902 and DR1805 magnets. Compressive Dimensions 65 x65 x 54mm.



**DR 01800Z**

Fixed counterplate with base in zinc plated steel for DR1901, DR1902 and DR1805 magnets. Compressive Dimensions 65 x65 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
Current consumption	70 mA
Holding force	>140Kg
Base dimensions	100 x 90 x 43mm

**DR01815Z**

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

**DR01810Z**

Fixed counterplate with base in zinc plated steel for DR18101 magnets. Compressive 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).



# Power stations and Modules

## SafeLevel

24V power supply station



SafeLevel is suitable for feeding all those fire detection system components located in the protected area. Thanks to its internal electronic card fulfills all the supervision functions required from EN54 standards and necessary to provide a fail proof power supply. It is available in two different models: the SPS24040 model can supply up to 1.4A at 27.6V and can house two batteries 12V – 7Ah; the SPS24140 model can supply up to 4A at 27.6V and can house two batteries 12V – 17Ah.

Each model provides 3 outputs, each one protected against short circuits and current limited to 4 A. The internal housed switching module can maintain under charge and supervised the batteries located in the box. SafeLevel can be connected to the panel loop (by adding an Input/Output module inside the cabinet – not supplied) or to the panel RS485 BUS, in this way panel will be able to supervise the power supply and switch ON/OFF its 3 power supply outputs. Thanks to this function it is possible to interface directly to the SafeLevel devices like door holder magnet, allowing the panel to switch them ON and OFF. A graphic LCD module is located in the front panel of the power supply, where details of any failure condition are reported (low battery, mains fault, ground fault, etc.) and the current sinked from each output is shown. Thanks to this feature it is possible to monitor steadily the current consumption of the powered devices.

By means of the navigation keys located on the front panel, users can scroll the event log and access the maintenance and configuration menu.

### Features and Technical specifications

- Input Voltage 230Vac +10% -15% 50/60 Hz
- Stability higher than 1%
- 3 Outputs, each one protected against short circuits and current limited to 4A
- LCD graphic display
- Buzzer
- Monitoring of the current consumption of each output
- Last 50 events log
- Integrated battery charger
- Batteries supervision
- Batteries disconnection in case of deep discharge
- Fault signalling relay output
- Inputs for power outputs switch ON/OFF
- Can be connected to the loop adding an input/output device (not supplied) for power supply supervision and outputs switch ON/OFF
- Can be connected to the panel RS485 BUS for power supply supervision and outputs switch ON/OFF
- Ground fault detection
- CPD EN54-4 approved

#### SPS24040

- Internal Switching Module can supply up to 1.4 A @27.6V • Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80mm • Weight (without batteries): 3Kg

#### SPS24140

- Internal Switching Module can supply up to 4 A @27.6V • Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87mm • Weight (without batteries): 6Kg

## Power supply modules and Boxed power supplies

FeelSef offers two switching power supply/battery charger units: the 1,4A model and the 4A model.

Each model is available in a in-box version. It consists of a switching power supply module housed in a metal cabinet where two batteries 12V can be housed too. It is an ideal solution for all that installations where it is not essential to supervise all the power supply parts.

All models provide a thermal probe input. This device protects the batteries against overheating and consequent permanent damage by measuring the battery temperature and regulating the power supply output voltage accordingly.

**IPS24040** – 1.4A Power supply module.

**BPS24040** - 1.4A Power supply module in enclosure.

- Input Voltage: 230Vac  $\pm$  15%, 50Hz
- Absorption from mains: 0.4A
- Output Voltage: 276Vdc
- Maximum output current: 1.4Adc
- Stability: higher than 1%
- Over-voltage protected
- Short-circuit protected
- Output voltage variations based on temperature (manages ProbeTH thermal probe)
- Metal casing



IPS24040



BPS24040

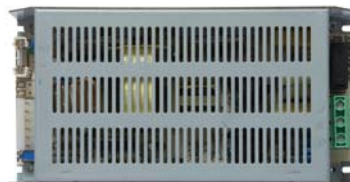
For the BPS24040 model:

- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80mm
- Weight (without batteries): 3Kg

**IPS24140** – 4A Power supply module.

**BPS24140** - 4A Power supply module in enclosure.

- Input Voltage: 230Vac  $\pm$  15%, 50Hz
- Absorption from mains: 0.9A
- Output Voltage: 276Vdc
- Maximum output current: 4Adc
- Stability: higher than 1%
- Over-voltage protected
- Short-circuit protected
- Output voltage variations based on temperature (manages ProbeTH thermal probe)
- Metal casing



IPS24140



BPS24140

For the BPS24140 model:

- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87mm
- Weight (without batteries): 6Kg

### ProbeTH

By adding this optional thermal probe to the panel/power supply it is possible to adapt the battery charge voltage to battery temperature, ensuring more suitable charge and having a longer battery life.



### ORDER CODES

**SPS24040**: 24V 1.4A power station

**SPS24140**: 24V 4A power station

**IPS24040**: 1.4A power supply module

**IPS24140**: 4A power supply module

**BPS24040**: 1.4A boxed power supply

**BPS24140**: 4A boxed power supply

**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



### **Safe420MA** - 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 FeelSef's Analogue-addressable control panels. Provides two trimmers for fine-adjustments to pre-alarm and alarm thresholds.



### **Safe485IN** - Standardized interface board

Connects directly to the RS485 BUS of FeelSef 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.



### **D100**

Specially designed for domestic applications and EN14604:2001 compliant. Alarm LED, sounder and Output. Battery operated.



### **TDM-1**

Suitable for system commissioning purposes.

Argus detectors (from the AURORA and VEGA series) will generate alarm status when the magnet is held in the vicinity of the test notches on their enclosures.

## 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 SafeLine and SafeLine 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 FeelSef control panels.



### LINKUSBAB - USB cable

USB connection cable between a PC and SafeLoop control panels.



### LINKUSB232CONV - Cable with RS232

USB conversion adaptor for connections between a PC and FeelSef 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 aerosol 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.



### **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.

# SafeLook

## Supervisory software

SafeLook is a software package for the centralized supervision and management of FeelSef'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 SafeLoop series, and conventional panels from the SafeLine series. The true potential of SafeLook 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 SafeLook software, thanks to its user-friendly interface, also plays an important role in home automation when it is applied to the management of a SafeLiving intrusion-control panel. The latter can be managed in the same installation as fire detection panels from the SafeLoop and SafeLine series.

The SafeLook 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 SafeLook software integrates video capabilities and consents to the incorporation of cameras and DVRs with IP network web interfaces.

The SafeLook software is capable of importing the system configuration by reading it directly on the control panel, or importing it from the database of the SafeLeague 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 SafeLook 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
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

- SafeLook/F01L:** Fire Licence – Licence for the management of one SafeLoop or SafeLine fire detection control panel. Non-Expandable
- SafeLook/F01E:** licence for the management of one SafeLoop or SafeLine fire detection control panel. Expandable Licence
- SafeLook/F02E:** licence for the management of two SafeLoop or SafeLine fire detection control panels. Expandable Licence
- SafeLook/F05E:** licence for the management of five SafeLoop or SafeLine fire detection control panels. Expandable Licence
- SafeLook/F10E:** licence for the management of ten SafeLoop or SafeLine fire detection control panels. Expandable Licence
- SafeLook/I01L:** "lite" Intrusion Licence - Licence for the management of one SafeLiving intrusion control panel. Non-Expandable Licence.
- SafeLook/I01E:** licence for the management of one SafeLiving intrusion control panel. Expandable Licence
- SafeLook/I02E:** licence for the management of two SafeLiving intrusion control panels. Expandable Licence
- SafeLook/I05E:** licence for the management of five SafeLiving intrusion control panels. Expandable Licence
- SafeLook/I10E:** licence for the management of 10 SafeLiving intrusion control panels. Expandable Licence

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

## SafeLeague

Programming and management software for FeelSef devices.



Each application contained in the SafeLeague package is distinct, however, all the applications share the same operational structure and interfaces. The applications allow management of fire control panels from the SafeLine, SafeLight and SafeLoop series, intrusion control panels from the SafeLiving series and GSM dialers from the SafeLink 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, FeelSef'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. SafeLeague really makes a difference when it comes to diagnostics. It provides a clear, interactive view of the status of the system.

When you use SafeLeague software to carry out diagnostics on a FeelSef 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.

SafeLeague 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, SafeLeague has integrated powerful data management and access-control tools. The software is open to all communication channels. SafeLeague 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 SafeLAN series network board.

The software can be downloaded, free of charge, at [www.FeelSef.com](http://www.FeelSef.com)



# EITK1000-ToolKit

Tool for configuration, maintenance and diagnostics



Front view of driver



Rear view of driver



EITK1000 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

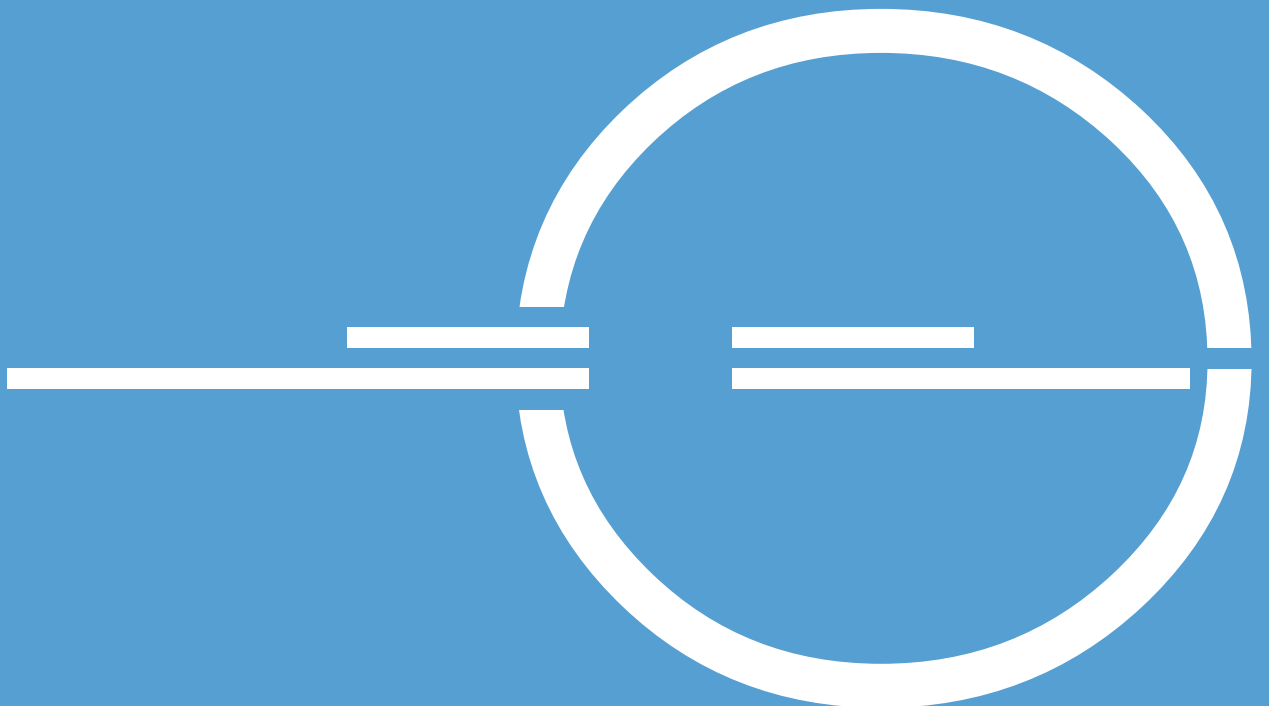
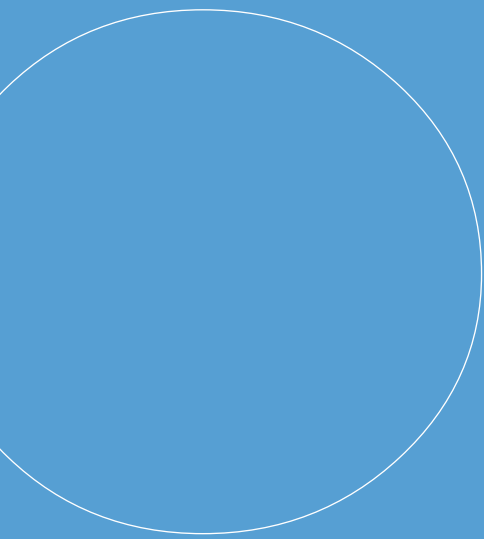
## ORDER CODES

**EITK1000**: kit for the configuration, maintenance and diagnostics of systems made up of IRIS and ENEA series devices

**EITK-DRV**: driver for zones made up of IRIS series devices or loops with ENEA series devices

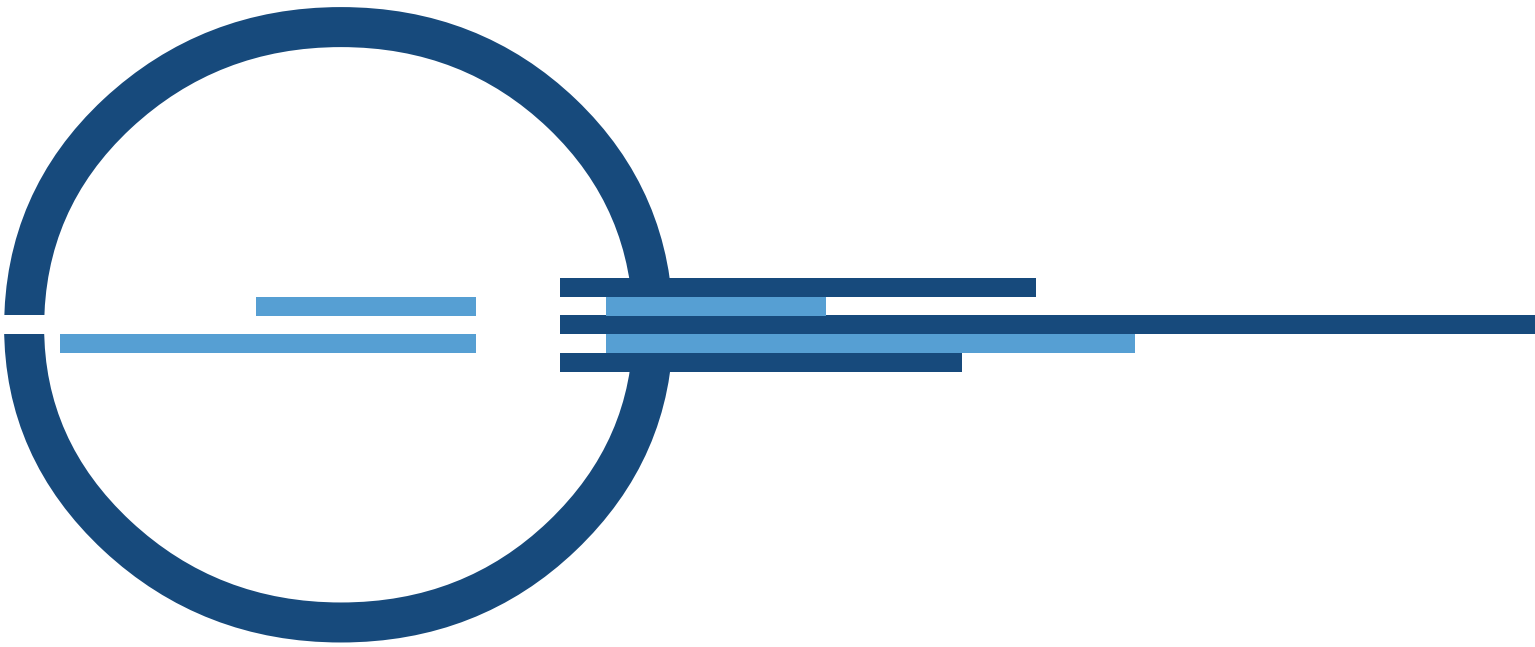
**EITK-BASE**: base for IRIS and ENEA series detectors.

**EITK-PWSP**: power supply for the EITKDRV driver





This **QR code** will connect you directly to the FeelSef website.



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