

SmartLoop

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



SmartLoop-P



SmartLoop-G



SmartLoop-S

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

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

These first-rate features have been made 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 SmartLoop system is rooted in the synergy of various state-of-the-art technologies: OpenLoop technology; HorNet token-ring technology; Emergency54 technology and Janus technology (refer to the "Technologies" section for details). The SmartLoop control panel has 5 supervised outputs for alarm and fault signaling (the efficiency of these outputs is monitored continuously). It can identify and diagnose anomalous conditions and provide an ample spectrum of visual signals: alarm, pre-alarm, fault, early warning, bypass, test, monitor. All system status signaling is indicated on the display and on the system status LEDs. In addition to the supervised outputs, this control panel provides two relays for alarm and fault signaling and also an output for battery shutdown signaling.

If you wish to increase the number of on-panel inputs and outputs, you can install a 6-terminal SmartLoopINOUT expansion board. Each of the SmartLoopINOUT terminals can be set up to operate as either a supervised output; a supervised input or a conventional detector zone. This important feature is yet another innovation pioneered by INIM. These "three-option" terminals abolish the inflexibility normally found in conventional input/output expansion boards and also allow the control panel to manage zones with conventional detectors. The SmartLoop system provides an RS485 BUS for remote-control Repeater panel connections. Two Repeater models are available: SmartLetUSee/LCD with display; SmartLetUSee/LED with status LEDs. Repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level. The RS485 BUS also accepts and manages a fire extinction control panel. Two models are available: SmartLine020-2EXT (single channel);



SmartLine036-4EXT (single channel). These fire extinction control panels are conventional panels from the SmartLine series and are equipped with a SmartLetLoose/ONE fire extinction board.

All the control panels from the SmartLoop series support the SmartLoop/PSTN board which provides voice and digital dialler functions. Programming the system from the control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the display. The time-saving Self-Addressing feature (for the loop devices) simplifies the procedure even more. The system can also be programmed using SmartLeague software application (runs under Windows) which offers an easy-to-use graphic interface. This method will allow the installer to program the system on a home or office computer and download the pre-set data at a later time via RS232, USB or Ethernet (for SmartLAN enhanced systems). The SmartLeague's simple "drag and drop" operations will allow you to enjoy the convenience and ease of configuring the system with the visual help of a virtual system.

The right-across-the-range components, reduced-complexity firmware, and optimized remote programming and diagnostic features keep the technicians time on site to a minimum. The SmartLoop fire control panel with its plain language excels in application flexibility. Its versatility and ease of operation makes it perfect for all market segments, from medium commercial applications to large facilities such as hospitals, shopping malls and airports.

ORDER CODES

SmartLoop1010/P: Control panel with 1 loop, non-expandable, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer.

SmartLoop2080/P: Control panel with 2 loops expandable to 8, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer.

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

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

SmartLoop1010/S: Control panel with 1 loop, non-expandable, unequipped flush front.

SmartLoop2080/S: Control panel with 2 loops expandable to 8, unequipped flush front.

Features and Technical specifications

- Analog-addressable fire control panel
- 2 loops expandable to 8 for 2080 expandable models
1 loop on non-expandable 1010 models
- All models in the SmartLoop series are EN54 Approved
- Multiprocessor hardware structure
- 32 bit main CPU
- OpenLoop Technology
- HorNet token- ring architecture
- Supports Emergency54 emergency configuration (CPU redundancy)
- Manages up to 30 panel token-ring network via the SmartLoop/NET board (accessory item)
- Easy remote access through SmartLAN board (accessory item)
- 2 or 4 wire loop connection
- Supports 240 devices per loop
- Manages up to 8 remote-control Repeater panels connected to the RS485 Interface
- Manages power stations on the RS485 BUS
- Manages a fire-suppression control panel on the RS485 BUS
- 3 general purpose NAC outputs
- 1 NAC Alarm output
- 1 NAC Trouble output
- 1 dry contact Alarm relay
- 1 dry contact Trouble relay
- RS485 BUS for Repeater panel connections (SmartLetUSee/LCD and SmartLetUSee/LED)
- Manages SmartLine020-4EXT and SmartLine036-4EXT fire extinguishing control panels via RS485 BUS
RS485 BUS (maximum wire length between panels 1000m)
- Manages up to 8 remote-control Repeater panels on the
- 1 24 V power supply output for external devices
- 1 24 V resettable output
- Battery shutdown relay for deep discharge conditions
- RS232 and USB connectors for uploading/downloading data
- 2000 event buffer
- Self-enrolling (for loop devices)
- Self-addressing (for loop devices)
- Manages conventional detectors (through SmartLoop/INOUT board)
- Emergency phone call (through SmartLoop/PSTN board)
- Large backlit alphanumeric display for easy management of Installer/User interface
- Navigation keys for easy access to menu options
- Fast keys (Test, Beeper, Silence, Reset, Evacuate, Investigate)
- Beeper (provides audible signals)
- User-friendly programming software (runs under Windows)
- Easy system programming from the control panel
- Code or key access to Level 2 functions (EN54 compliant)
- On-board connector for Thermal probe (accessory item).
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal box
- Mains power supply 230Vac \pm 10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 480x470x135mm
- Weight (without batteries): 8Kg

SmartLoop system enhancement devices connectable on the RS485 BUS



SmartLetUSee/LCD – SmartLetUSee/LCD – Remote LCD Repeater panel

This LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel and is ideal for installation in remote locations where system information and manual control are required. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.



SmartLetUSee/LCD-RK – Remote LCD Repeater panel – 19” Rack Mount

This LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel and is suitable for 19” rack mounting. This device occupies 5 rack units. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.



SmartLetUSee/LED – Remote LED Repeater panel

This visual repeater panel provides 48 programmable LEDs capable of signalling conditions generated by the loop points, control panel zones or the system as a whole (alarms, pre-alarms, trouble, etc.). Each LED can be characterized by a label for easy identification of the status it is associated with. This device connects to SmartLetUSee/LCD Repeater panel by means of a flat cable (included) and together they provide maximum system control and visualization capacities.



SmartMimic – Synoptic panel board

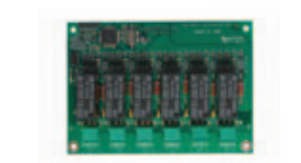
This board allows you to create a synoptic panel. All you need to do is attach a map (layout) of the protected premises to the front of any ordinary enclosure, perforate the map (layout) in the places where the zones are located, then wire up the LEDs using the wires supplied with the board. The board connects to the RS485 BUS port of the SmartLoop control panel and provides 48 connections for the LED wires.

SmartLoop system enhancement devices connectable on the SmartLoop mother board



SmartLoop/2L – OpenLoop expansion board

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



SmartLoop/INOUT – Input and output expansion board

SmartLoop/INOUT expansion boards provide 6 terminals. Each terminal can be set up to operate as either a supervised output NAC (1A max.); supervised input or input line (zone) for conventional detectors. The output trigger signals and the actions generated by the activation of the inputs are fully programmable.



SmartLoop/NET – SmartLoop HorNet network board

The SmartLoop/NET board allows the control panel to be configured in a SmartLoop HorNet network (token-ring). The ring can be created using a 3 pole cable. The maximum cable length of 2000 meters (allowed between each control panel) provides a highly fault-tolerant network. Using a supplementary 2 pole cable (5 poles in all), you can create a protection ring which can pass alarm conditions coming from a fire control panel with microprocessor fault, through the ring thus ensuring maximum reliability (Emergency54 technology).



SmartLoop/PSTN – PSTN Voice and digital dialler

The SmartLoop/PSTN board allows the SmartLoop fire control panel to use the land line (PSTN). It manages (and monitors) 2 lines and uses the most widely used reporting protocols (SIA, Contact ID, etc.). It has an 8 slot audio memory for up to eight voice call messages. Completely managed by its on-board microcontroller, it generates an emergency call in the event of a CPU fault, and guarantees an emergency call in the event of an alarm during control panel CPU fault.



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

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



SmartLAN/SF – Ethernet interface for Internet via TCP-IP

The SmartLAN/SF board connects to any Ethernet network and 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 SmartLook INIM software. Supports Modbus over TCP/IP



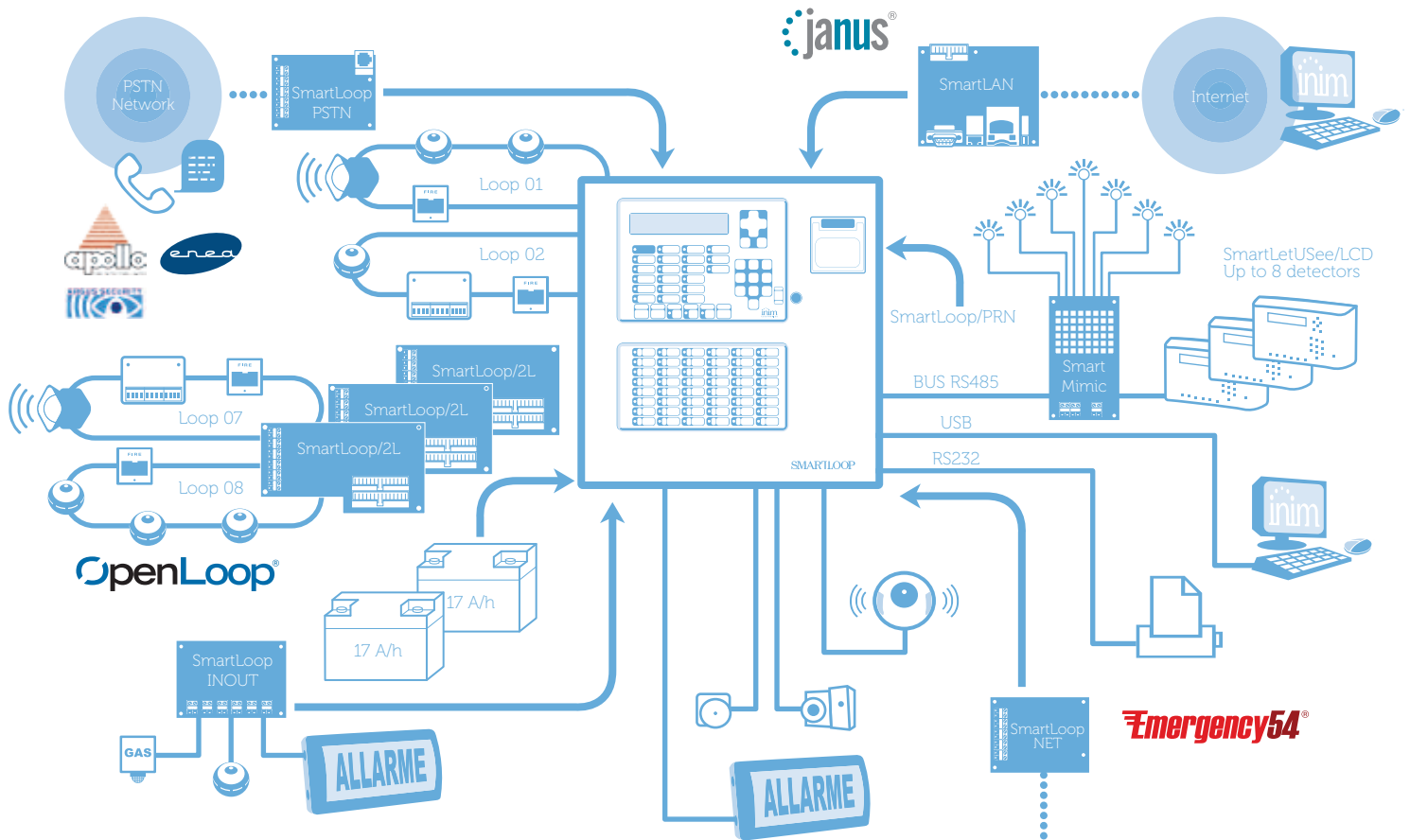
SmartLoop/PRN – On-front Printer Module

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

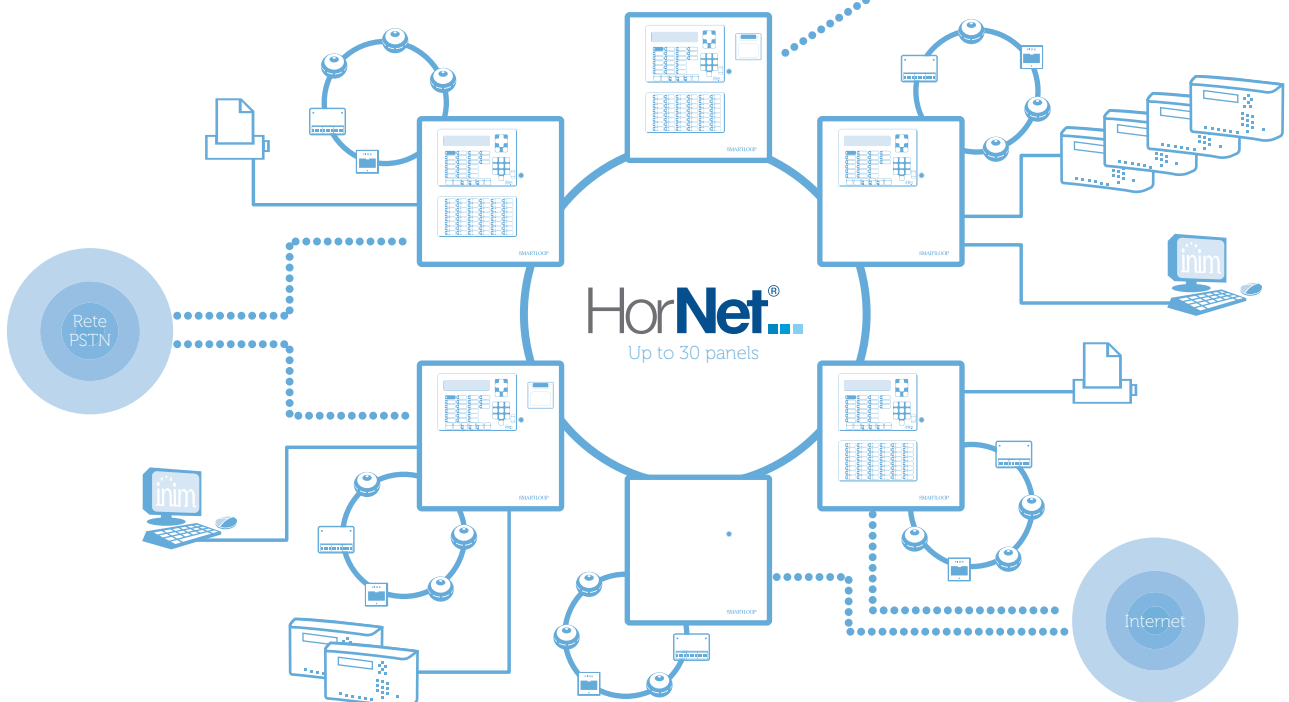
Control Panel Models	By design		Optional attachment boards					
	Keypad and Display	48 Status LED board	SmartLoop 2L	SmartLoop PRN	SmartLoop INOUT	SmartLoop NET	SmartLoop PSTN	SmartLAN SmartLAN/SF
SmartLoop/1010 - P	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
SmartLoop/2080 - P	Yes	Yes	Yes (Max 3)	Yes	Yes	Yes	Yes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

SmartLoop Addressable analogue detection

SmartLoop Panel overview



SmartLoop Net



Fire detection and suppression systems

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

Absorbed current by accessory boards

SmartLoop/2L	stby:20mA MAX:70mA
SmartLoop/INOUT	stby:40mA MAX:300mA
SmartLoop/NET	stby:40mA MAX:40mA
SmartLoop/PSTN	stby:20mA MAX:60mA
SmartLAN	stby:200mA MAX:200mA
SmartLAN/SF	stby:40mA MAX:40mA
SmartMimic	stby: 5mA MAX:50mA
SmartLoop/LED	stby:40mA MAX:80mA
SmartLoop/PRN	stby:0 MAX:1A
SmartLetUSeep/LCD	stby: 40mA MAX:50mA
SmartLetUSeep/LED	stby: 5mA MAX:50mA

ORDER CODES

SmartLoop1010/P: control panel with 1 loop, non-expandable, equipped with command keypad, display, status LEDs and housing for SmartLoop/PRN printer (accessory item).

SmartLoop2080/P: control panel with 2 loops expandable to 8, equipped with command keypad, display, status LEDs and housing for SmartLoop/PRN printer (accessory item).

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

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

SmartLoop1010/S: control panel with 1 loop, non-expandable, with unequipped flush front.

SmartLoop2080/S: control panel with 2 loops expandable to 8, with unequipped flush front.

SmartLetUSeeLCD: remote LCD repeater panel.

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

SmartLetUSeeLED: remote LED Repeater panel.

SmartLoop2L: OpenLoop expansion board.

SmartLoopINOUT: input and output expansion board.

SmartLoopNET: board for the connection of SmartLoop control panels in a Hornet network.

SmartLoopPSTN: landline digital and voice dialler board.

SmartLoopPRN: thermal printer module.

SmartLAN: ethernet interface for Internet connections over TCP-IP and remote programming and supervision.

SmartLAN/SF: ethernet interface for Internet connections over TCP-IP.

SmartMimic: synoptic board.

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

SmartLine036/4EXT: single-channel fire suppression control panel with 4 conventional zones expandable to 39.

SmartLeague: programming and management software for INIM products runs under Windows.

Link232F9F9: RS232 cable link between PC and INIM devices.

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

SPS24040: switching power supply/battery charger 24V 1.4A.

SPS24140: switching power supply/battery charger 24V 4A.