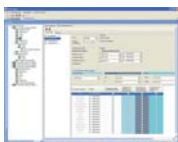


## SmartLoop

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



SmartLeague



SmartLoop-G



SmartLoop-S

The SmartLoop series of analog-addressable fire control panels marks a clear evolution from previous generations. This series has solutions to satisfy all market segments: from small cosmetic 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 (dual



SmartLoop main board

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.

### SmartLoop models

**SmartLoop/1010-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.

**SmartLoop/2080-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.

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

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

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

**SmartLoop/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 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 1 SmartLine/EXT fire extinguishing system control panel through 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 SmartLine020-4E and SmartLine036-4E fire extinguishing control panels via RS485 BUS
- Manages up to 8 remote-control Repeater panels on the RS485 BUS (maximum wire length between panels 1000m)
- 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 ± 10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 480x470x135mm
- Weight (without batteries): 8Kg

# Control panels

## Description of the SmartLoop system enhancement devices



### SmartLetUSee/LCD – Remote control Repeater panel with LCD

The SmartLetUSee/LCD Repeater panel replicates all the fire alarm system data and allows users to access and control the system in accordance with their authorized access level. It is equipped with a keypad, display and fast buttons, and is ideal for installation in remote locations where system information and manual control facilities are required. The SmartLoop has an RS485 BUS which accommodates up to 8 Repeater panels which can be located up to 1000m from the control panel.



### SmartLetUSee/LCD-RK – Mount-to 19" rack remote repeater-panel (view, control, etc.) with LCD

Optional system enhancement panel with keypad, LEDs and display. It replicates all the system functions and mounts to a 19" rack. The repeater takes up 5 units of the rack. SmartLoop control panels accept up to 8 repeaters which can be connected as far away as 1000 m from the control panel. They connect to the control panel via the RS485 bus on the motherboard.



### SmartLetUSee/LED – Remote Repeater panel with status LEDs

The SmartLetUSee/LED Repeater panel replicates all the fire alarm system data. It is equipped with 48 fully programmable system status LEDs. The LEDs can be assigned to loop points, control panel or system zones to signal alarm, pre-alarm, fault, etc., and can be individually labelled to indicate their programmed assignment. This panel can be connected to the SmartLetUSee/LCD by means of a flat cable (included) to enhance visual signals.



### 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.



### 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 motherboard 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.



### 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.

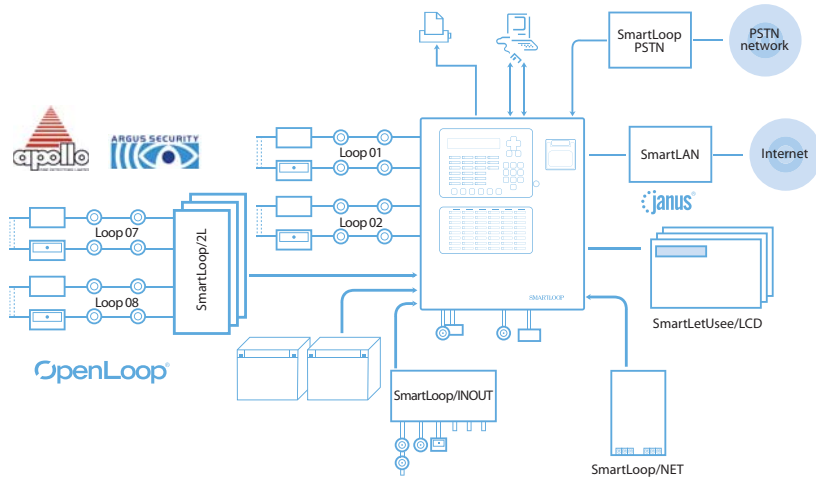


### SmartMimic – Mimic panel board

Allow installer to create its own mimic panel, by using a common box, sticking on the front a printing of the building / floor plant, making holes in the points of the plant where zones are defined and inserting the supplied LEDs with cable in that holes. The module can be connected on the Smart Loop RS485 BUS and supply 48 connectors where the supplied cables with LEDs on the end can be connected.

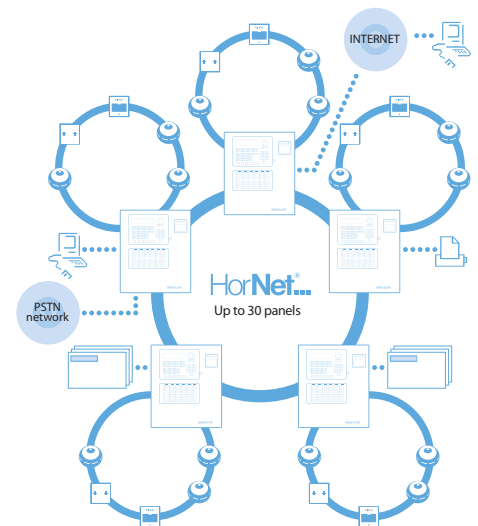
Control Panel Models	By design		Optional attachment boards					
	Keypad and Display	48 Status LED board	SmartLoop 2L	SmartLoop PRN	SmartLoop INOUT	SmartLoop NET	SmartLoop PSTN	SmartLAN
SmartLoop/1010 - P	YES	YES	-	YES	YES	YES	YES	YES
SmartLoop/2080 - P	YES	YES	YES (up to 3 for 6 loops)	YES	YES	YES	YES	YES
SmartLoop/1010 - G	YES	-	-	-	YES	YES	YES	YES
SmartLoop/2080 - G	YES	-	YES (up to 3 for 6 loops)	-	YES	YES	YES	YES
SmartLoop/1010 - S	-	-	-	-	YES	YES	YES	YES
SmartLoop/2080 - S	-	-	YES (up to 3 for 6 loops)	-	YES	YES	YES	YES

## SmartLoop Panel overview



## Order Codes

## SmartLoop Network



**SmartLoop/1010-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

**SmartLoop/2080-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

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

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

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

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

**SmartLetUSee/LCD** – Remote control Repeater panel with display

**SmartLetUSee/LCD-RK** – Mount-to 19" rack remote repeater-panel (view, control, etc.) with LCD

**SmartLetUSee/LED** – Remote control Repeater panel with status LEDs

**SmartLoop/2L** – OpenLoop expansion board with 2 loops

**SmartLoop/INOUT** – Input and output expansion board with 6 terminals

**SmartLoop/NET** – SmartLoop HorNet network board

**SmartLoop/PSTN** – PSTN voice and digital dialler board

**SmartLoop/PRN** – Thermal printer module

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

**SmartMimic** – Mimic panel board

**SmartLine020-4EXT:** Single-channel fire extinction control panel with 4 conventional zones expandable to 20

**SmartLine036-4EXT:** Single-channel fire extinction control panel with 4 conventional zones expandable to 36

**SmartLeague:** Programming and management software for INIM products runs under Windows™

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

**LinkUSBAB:** USB cable link between PC and INIM devices

**IPS24140:** Switching power supply/battery charger 4A@27.6Vdc

**ProbeTH:** Thermal probe. This device protects the battery against overheating and consequent permanent damage.