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Product Overview:

The **Loop Responder** extends the **Pertronic** Analogue Addressable Automatic Fire Alarm system by providing an interface to conventional detector circuits.

It is used primarily in Conventional Circuit 'Smoke' mode to interface zones of conventional detectors into Pertronic analogue addressable fire alarm systems, but may alternatively be used in 'Switch' mode to monitor interference switches of sprinkler valves, reading the fault and alarm status from FFAST™ systems, or receiving commands from a SCADA system.



Features:

- ▶ Controls eight 2-wire detector circuits
 - ▶ May be configured to operate in conventional circuit 'Smoke' mode or 'Switch' mode
 - ▶ Each 'Smoke' mode circuit may contain up to 40 System Sensor™ conventional detectors plus an unlimited number of **Pertronic** indicating Manual Call-Points and indicating Heat detectors
 - ▶ Provides one non-monitored change-over (NC-C-NO) relay
 - ▶ Using multiple **Loop Responders**, up to 64 conventional circuits may be installed on a single analogue loop
 - ▶ Firmware is available to support NZS 4512:2010 / NZS 4512:2003 and NZS 4512:1997
 - ▶ NZS 4512:2010/ 2003 Conventional devices on a NZS 4512:2010/ 2003 Analogue Addressable panel
 - ▶ NZS 4512:1997 Conventional devices on a NZS 4512:2010 / 2003 Analogue Addressable panel
 - ▶ NZS 4512:1997 Conventional devices on a NZS 4512:1997 Analogue Addressable panel
- Note: an open or short-circuit on a NZS 4512:2010 / 2003 Loop Responder produces a Defect, not an Alarm

Connection and Loop Isolation:

- ▶ Connects into the standard 2-wire addressable loop wiring
- ▶ Loop protection is provided by an isolation relay in the Responder
- ▶ The loop can maintain normal operation with a single loop break, or with a single short-circuit

Configuration Facilities:

- ▶ The analogue addressable panel, **F100A** or **F120A** provides diagnostic and configuration facilities at the panel using an LCD display and keypad

Specifications:

Dimensions:

PCB:	H x W mm	96 x 165
Cabinet:	H x W x D mm	255 x 305 x 90
	Weight	1.5 kg
	Material	1.2 mm mild steel, powder coated off-white (other colours optional)

Power Supply:

Quiescent:	24 Vdc, 20 mA	- with no detectors
add	1 mA for each group of 10 detectors (10 mA for 100 detectors).	- may be supplied from the analogue loop (350 mA maximum) or from a separate isolated power supply

Circuits per Responder:

8 conventional circuits per Responder

Relay:

one non-monitored change-over contact rated at 30 Vdc @ 2 A

Maximum Loading:

40 smoke detectors per circuit
- plus unlimited indicating Call-Points and indicating Heat detectors

Number of Loop Responders:

8 maximum for a total of 64 Conventional circuits

Addressing:

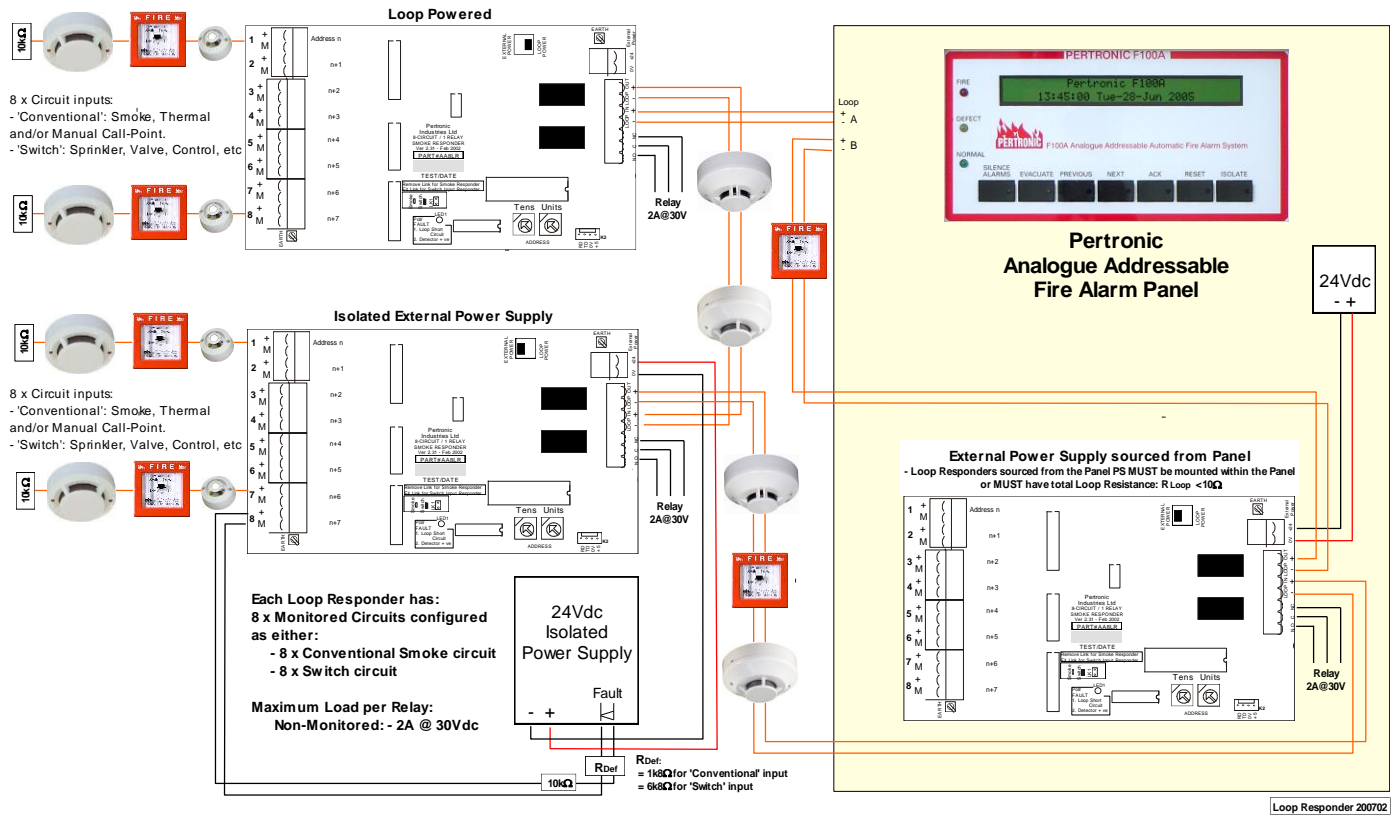
Each Loop Responder uses 9 address spaces

- the first 8 addresses are allocated to circuits 1 to 8 respectively, the ninth (9th) address space is to address the output relay
- the address switches select the base or start address for the Loop Responder, and correspond to the address for Circuit 1



Certificate No:
205487-2016-
AQ-AUS-JAS-ANZ

Loop Responder Connections:



Ordering Information:

Product Code	Description	NZFPA Listing No.
F100LR-3	AA Loop Responder board : NZS 4512:2010/ NZS 4512:2003	PI633
F100LR	AA Loop Responder board : NZS 4512:1997	
F100LRC	AA Loop Responder Case	

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