



F100A

2-4 Loop Analogue Addressable Panel (NZS 4512:2003 and NZS4512:2010)

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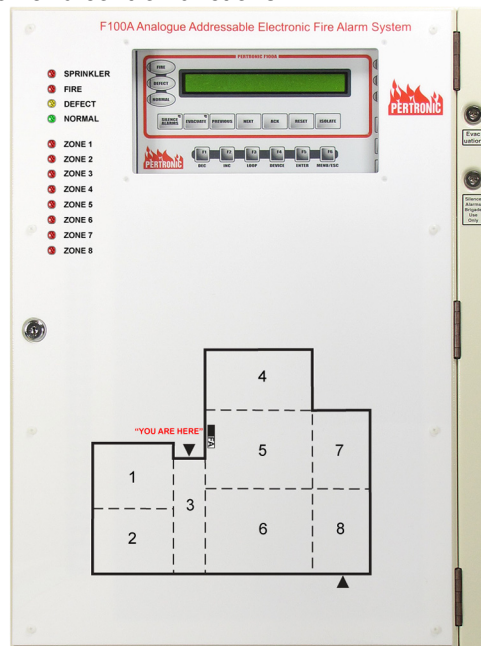
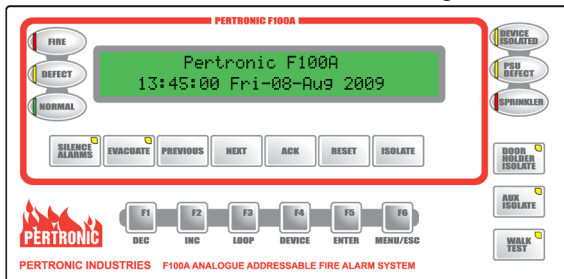
ISO 9001: 2000

International
Standards
Certifications
QAC/R61/0051

Product Overview:

The F100A Analogue Addressable panel is a sophisticated and versatile Fire Alarm panel, designed for installations that require flexible configuration and control functions.

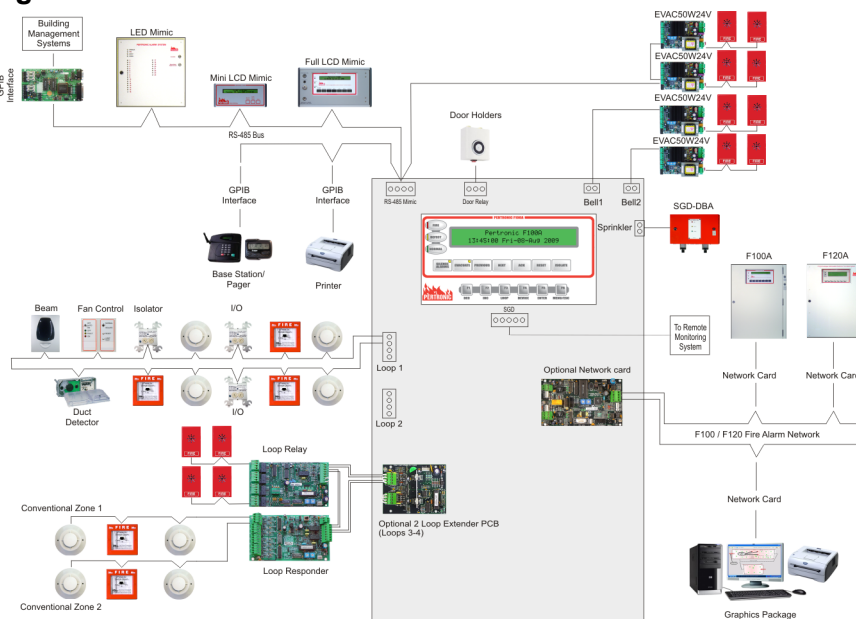
The F100A complies with New Zealand Standard NZS4512:2003 / NZS4512:2010 and with the requirements of the New Zealand Building Code.



Features:

- ▶ Precise Identification of Fire Location with user-definable English language text description.
- ▶ Large 2 x 40 character back-lit LCD Display.
- ▶ 24-character configurable text message per Address, Zone, Logic Block, Timer and Network input.
- ▶ Automatic 'Pre-Alarm' warnings.
- ▶ Automatic 24-Hour 'System Test' of all Detectors and Battery.
- ▶ 2 to 4 Loops provides a maximum 400 Detectors plus 400 Modules.
- ▶ Supports 127 nodes on the Pertronic network
- ▶ Supports up to 64 outputs to the network and 64 inputs from the network.
- ▶ Loop input devices include detectors, call-points, loop responders, relay responders and modules.
- ▶ Addressable loop relays can be configured as Sounder relays, Auxiliary relays or Door Holder relays, etc.
- ▶ User Isolation of zones and individual detectors.
- ▶ 2560 Event Historical Log.
- ▶ Configuration data may be entered through the front panel menu controls or using PC Configuration Utility.
- ▶ Comprehensive front panel Menu controls.

System Diagram:



F100A Specification:

- ▶ **Cabinet:** Size 1:600x450x130 15kg (+Batt, PCBs)
Size 2:900x450x130 20kg (+Batt, PCBs)
Material: 1.2mm mild steel, powder coated beige
- ▶ **Power Supply:** 230Vac, 50Hz, 40W
- ▶ **Battery Type:** internal SLA battery, 24V, 17Ah
- ▶ **Charger:** Integral float charger, temperature compensated
27.4Vdc, 1.5A or optional 4A
- ▶ **Standby Current:** 2-loop = 165mA; 4-loop = 210mA
- ▶ **Zone Indication:** Up to 128 physical zones
- ▶ **Protocol:** Intelligent System Sensor protocol:
- ▶ **Loop Capacity:** 2 to 4 analogue addressable loops, support 100 Detectors and 100 Modules per loop. Maximum 400 Detectors and 400 Modules.
- ▶ **Loop Characteristics:** Length (max) 1km, 1mm² cable
Loop Resistance (max): 38Ω
Cable Size/Type: 1mm² to 2.5mm², twisted-pair
- ▶ **Serial RS-232 Port:** for panel configuration via PC
- ▶ **Serial RS-485 Ports:** for ancillary equipment
- ▶ **Historic Event Log:** 2560 events
- ▶ **LCD Display:** 2 line x 40 character alphanumeric back-lit display
- ▶ **Mimic Connections:** up to 32 devices: LCD Mimics, LED Mimics, Amplifiers or Network Cards, may be connected to the RS485 port. 16 full function, the remainder slaves.
- ▶ **LCD Mimics:** supports up to 8 remote monitored LCD mimics with either 'full' or 'mini' functionality.
- ▶ **LED Mimics:** supports up to 8 monitored LED Mimics, each capable of driving 128 LEDs plus 'Silence Alarms' (BCO) and 'Evacuate' controls.
- ▶ **Pertronic Network:** provides up to 64 network inputs
each Network Card is connected to an **F100A** or **F120A** panel via the serial RS-485 port
- ▶ **Fire Relay:** 1 changeover contact rated at 24Vdc, 2A Normally de-energised
- ▶ **Defect Relay:** 1 changeover contact, rated at 24Vdc, 2A Normally energised
- ▶ **Sounder:** 2 circuits (BELL1 and BELL2), fused at 5A each Monitored and Configurable.
- ▶ **General Purpose (GP):** 2 sets of change-over contacts rated at 24Vdc, 2A. Not monitored; Configurable
- ▶ **Door Holder Relay:** 1 single changeover contact, rated at 24Vdc, 5A. Not monitored; Configurable
Door Holder 'Isolate' switch
- ▶ **AUXM Relay:** 1 voltage-reversal output, rated at 24Vdc, 100mA. Monitored. Configurable
- ▶ **AUX Relay:** 1 change-over contact, rated at 24Vdc, 2A resistive. Not monitored. Configurable
- ▶ **AUX Isolate switch** isolates all AUX outputs
- ▶ **Open Collector:** 8 programmable outputs: switched to 0V
I_{PEAK}=500mA; I_{CONTINUOUS}=150mA, V_{MAX}=50V
- ▶ **Test Mode:** individual function for detectors and modules
- ▶ **Other Functions:**
 - ▶ Earth Monitoring
 - ▶ Configurable 'Sprinkler' input: monitored, non-latching
 - ▶ Sprinkler operated LED
 - ▶ Brigade interface: 'Fire', 'Defect', 'Isolate', 'Test'. eg SGD
 - ▶ Selectable Standard: NZS4512:2003 or NZS4512:1997
 - ▶ Front panel 'Silence Alarms' and 'Evacuation' key-switches
 - ▶ Walk Test
 - ▶ Door microswitch, Door Interlock and External Defect loops
 - ▶ **System Test:** automatic 24-Hour test of all Detectors and Battery or can be individually tested on demand, via the menu
 - ▶ **Isolation:** all devices, detectors, modules, Zones, Groups, Logic Gates and Timers may be individually isolated
 - ▶ **Virtual Detector:** supports 'virtual' detector mode
 - ▶ **Fan Control:** supports control of fan relays
 - ▶ **Brigade Latch:** non-latching detectors latch if and when the 'Alarm' relay operates
 - ▶ **Day/Night Mode:** supports variable sensitivity levels for variable occupation modes
 - ▶ **Configurable Attributes:** detectors can be individually configured for: Bell 1, Bell 2, Brigade Calling, Latching, Auxiliary Relay, Door Holder Relay, Buzzer on Alarm, Alarm Verification Facility (AVF), Detector Sensitivity and Zone assignment
 - ▶ **Configuration:** detectors and modules can be directly configured to any system output
 - ▶ **Configurable Software Groups:** 64 groups, each with 32 outputs can be configured to any system output or other group
 - ▶ **System Events:** 16 events can be configured to control any system output: eg. Common Fire, Defect, Pre-Alarm, etc.
 - ▶ **Logic Block Functions:** 32 Logic Block functions (OR, AND, ANY) can be configured to be activated by any input on the system and can be interconnected to perform complex logic functions. Any Logic Block can turn on any system output
 - ▶ **Configurable Timers:** 16 independent timers; each configurable for 1 second to 36 minute time period
 - ▶ Each timer has configurable panel attributes
 - ▶ 4 timer types are available ('One Shot', 'Continuous', 'Double-Knock' and 'Latching')
 - ▶ Each timer can directly turn on one output on timer 'Run' and one output on timer 'Finish'
 - ▶ **Configurable 24-Hour Timers:** 4 timers with independent Start and End times include Week-Day and Week-End mode and 2 configurable outputs each
 - ▶ **On-site Configurability:** from front panel menu controls or via the graphical configuration and monitoring PC software.
 - ▶ **Remote Monitoring:** configuration and control via modem, internet connection or suitable mobile phone is available
 - ▶ **Status Reporting:** for individual detectors and modules
 - ▶ **Virtual Panel display:** provides complete control and graphical representation of the panel's LCD, front panel switches and indications at a remote location

Product Codes:

Code	Description	NZFPA Listing No
F100AR-3	F100A RS 2 Loop AA Panel - NZS4512:2003	PI/120
F100AF-3	F100A FS 2 Loop AA Panel - NZS4512:2003	PI/120
F100ATR-3	F100A RS 900mm 2 Loop Panel - NZS4512:2003	PI/120
F100ATF-3	F100A FS 900mm 2 Loop Panel - NZS4512:2003	PI/120
F100P2LB	F100A 2 Loop Extension Board	PI/120
F100ZMB-3	F100A Master Board NZS4512:2003	PI/120

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