

FPA-1000 Analog Addressable Fire Panels

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Invented for life



- ▶ Support for up to 508 points on two analog addressable loops
- ▶ Built-in Ethernet connector for web-browser based programming and Conettix Alarm-over-IP communication
- ▶ Two on-board NACs and dual-line PSTN DACT
- ▶ Peer-to-peer networking of up to eight -V2 panels in a single group
- ▶ Suited to a wide range of applications and compatible with the latest Bosch solutions - including 440 Series Multi-criteria detectors

The FPA-1000 Analog Addressable Fire Panels are a scalable solution for fire detection. Protect your small office with a single system or connect multiple panels together as your needs grow. Networking capabilities support the monitoring of up to 8 interconnected panels (2,000 addressable points) in one system for campuses or other large commercial environments. The FPA-1000 panels combine complete built-in Fire Alarm Control Panel (FACP) equipment such as Notification Appliance Circuits (NACs), Signaling Line Circuits (SLCs), relays, power supply, Digital Alarm Communicator Transmitter (DACT), and Ethernet connection with expandability using the option bus or plug-in boards. The two integrated NACs can be expanded with remote addressable NAC power boosters and programmed with specific activation patterns.

The control panel includes one SLC that supports 254 addressable points (254 analog detectors or modules, or 127 analog sounder bases in combination with a suitable detector). The control panel is easily expandable with the FPE-1000-SLC Signaling Line Circuit Plug-in Module, doubling the address points to 508.

The panel has a compact and solid metal housing with a keyed lock and a removable dead front door to access electronics. It features surface and semi-flush mounting options. On the front of the panel, six light-emitting diodes (LEDs) show Fire, Carbon Monoxide (Gas) Alarm, Power, Supervisory, Silenced, and Trouble conditions. The built-in keypad can be used for total system control and programming even when wearing fireman gloves. In addition, a large 4-line by 20-character alphanumeric LCD display shows programmed device point information. Four keys enable Drill, Reset, Silence, and Acknowledge functions.

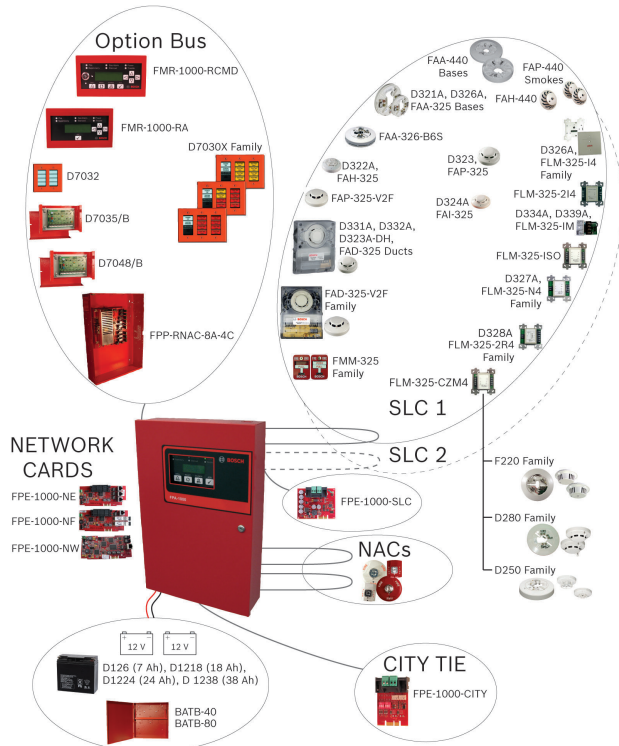
The FPA-1000 panels enable various programming approaches:

- Front panel programming
- On-site programming, using a laptop with the possibility of pre-programming at the office
- Off-site programming, with remote access via Ethernet (browser-based)

Front panel programming provides an auto-learn function, allowing the installer to configure the system quickly and easily in default mode. Using a local laptop or remote access communication, the programming is carried out by means of a browser-based user

interface. Therefore, no software installation is required. The panel can receive diagnostics from a Web browser running on an internet-connected PC.

System overview



Functions

Peer-to-peer Communications

The FPA-1000-V2 panels allow peer-to-peer networking of up to eight panels in a single group supporting a system which can include up to 2000 points. Networked panels act as a single panel enabling all events to be displayed on all units. All connected panels can easily be programmed and controlled via any connected panel. Ethernet, fiber optic, or 2-conductor wire inter-panel connections can be mixed providing flexibility in system design.

System Management

A set of interactive Web pages gives you an instant means to access and record important system functions. This unique feature enables programming and diagnostic capabilities while off-site, streamlining installation and reducing the time required for servicing the system. And, you can check status and manage the system from virtually anywhere on the network.

Communications

The FPA-1000 panels have a dual phone line PSTN/DACT circuit and an Ethernet connection featuring Conettix IP reporting. The panels communicate in Contact ID, SIA, and Modem IIIa². The panels provide

miscellaneous reporting functions such as dialing control and transmission supervision, priorities of report groups, routing to destinations, manual and auto test reports, and Anti-Replay feature. For the primary and secondary account, the following features are programmable:

- Two different phone or IP numbers
- Different dialing types for PSTN (pulse only, automatic, or tone only)
- Individual PSTN line supervision (audible and visual trouble signal in the case of a transmission path failure)
- Selectable options for Report Steering Groups
- Programmable supervision time for each IP reporting Conettix account
- Test report frequency individually programmable for each account (4, 6, 24 hour, 7 and 28 day intervals, standard frequency 24 hour)

Applications

The panels are recommended for a wide range of commercial and public building applications, including:

- Retail - single building applications
- Education - schools and universities
- Residential - apartment buildings
- Commercial - manufacturing plants, warehouses and office complexes
- Government and Public Service - military bases and installations
- Medical - healthcare facilities

Multi-criteria Detectors

A range of pull stations, modules, accessories and detectors are available to meet the needs of your application. These include the new Automatic Fire Detector 440 family that incorporates multi-criteria technology for higher sensitivity, faster detection, and fewer false alarms.

Gas detection

Integrated gas detection is an important element of your facility's fire and life safety strategy. Using FCC-380 Carbon Monoxide detectors combined with an addressable monitor module, you can set your system to alarm for carbon monoxide to meet the NFPA requirements for visual and audible annunciation for this hazardous gas.

Notification Appliance Circuits (NACs)

Two Class A or Class B NACs provide up to 4 A of 24 V power (non-synchronized: 2.5 A per NAC, synchronized: 2.75 A NAC 1 + NAC 2 in total) to operate horns, strobes, bells, and other notification appliances. Each NAC can be programmed to provide Temporal Code 4, Temporal Code 3, and steady, pulsing, and synchronized protocol output for Wheelock, Gentex, and System Sensor notification appliances.

On-board Relays

Three programmable on-board relays default to global alarm (zone 226), global system trouble (zone 227), and global system supervisory (zone 228). They can be programmed to activate on a variety of conditions including gas alarm.

Option Bus

On the Option Bus, the panels support up to:

- eight FMR-1000-RCMD Remote Command Centers and FMR-1000-RA Remote Annunciators in any combination
- eight D7030X Series LED Annunciators with eight LED zones each
- eight D7030X Series/D7032 combinations
- two Octal Relay Modules or Octal Driver Modules
- four FPP-RNAC-8A-4C Remote Notification Appliance Circuit Power Supplies

The outputs of the Octal Relay Modules or Octal Driver Modules are fully programmable, and can be activated by system events. These outputs have the same programming options as the local relays. Each output operates independently of the other seven to provide complete flexibility. Communication with the D7035/B or D7048 is supervised.

Power

A transformer working with 120 VAC or 240 VAC is supplied standard with the control panel. Two backup batteries with 7 Ah to 18 Ah each fit inside the fire panel cabinet. A separate battery box can provide higher capacity. An automated battery calculator sheet is available online to aid in battery selection and submittal paperwork.

The panels provide two auxiliary power supplies (one FWR and one DC) with 0.5 A at 24 V each, with switchable AUX/RST. This auxiliary power can run expansion boards or other low current auxiliary devices.

For installations requiring battery capacity higher than 40 Ah, a regulated and UL1481 Listed external power supply can be used. The external power supply connects through the panel's battery terminals and is supervised for AC and battery fault by an input module on the SLC.

The FPP-RNAC-8A-4C Remote NAC Booster adds four additional Notification Appliance Circuits (NFPA 72, Class A or Class B) to the fire panel or serves as a power supply for fire protective signaling systems. This regulated power supply provides up to 8 A of power that is used to recharge batteries and operate continuous and intermittent alarm loads. This 8 A of power can be distributed through the four NAC Power Supply circuits that are part of the FPP-RNAC-8A-4C. The FPP-RNAC-8A-4C is UL Listed for use in commercial fire alarm applications.

Signaling Line Circuits (SLCs)

The panels communicate with each of the analog addressable devices located on the SLCs. The SLCs allow the use of standard non-twisted, non-shielded wiring. Each panel supports two Class B circuits or one Class X circuit or one Class A circuit per SLC.

Certifications and approvals

Region	Regulatory compliance/quality marks	
USA	UL	FSZL.S1871: Emergency Alarm System Control Units (ANSI/UL 2017); UOJZ: Control Units, System (ANSI/UL 864)
	FM	FPA-1000
	CSFM	see the Bosch website (www.boschsecurity.com)
	FDNY-CoA	6101

Installation/configuration notes

Mounting Considerations

The cabinet can be either semi-flush (requires optional FPM-1000-SFMK Semi-flush Mounting Kit) or surface mounted.

Depending on the configuration and the battery selection, the FPA-1000 can be heavy. When attaching the enclosure to a surface, use mounting hardware (not supplied) capable of supporting this weight, and reinforce the wall as necessary.

Wiring Considerations

The length of wire allowed between the control panel and the last device on a wiring run depends on the current drawn on that wiring run. Reducing the number of devices on a wiring run allows the individual runs to be longer.

If not otherwise specified, use wire gauge 12 AWG to 18 AWG (ISO 4 mm² to 0.75 mm²).



Notice

Shared cable is not recommended for the Option Bus, addressable-points bus, telephone, or NAC wiring. Do not run wiring for NAC, Option Bus, and SLC in the same conduit. Avoid shielded or twisted-pair wire except for network connections and special applications where a reduced length of wiring (roughly 50%) is acceptable for tolerating a harsh electrical environment.

Point Capacity/Configuration

Each FPA-1000-V2 panel supports up to 508 addresses, 254 per loop. All compatible detectors and modules are addressed using the D5070 Programmer. You can use addresses 1 to 127 for any combination of detectors and modules. SLC devices that support the newest DCP protocol version 2.0 can use addresses 1 to 254. For a listing of devices that can use addresses up to 254, see the SLC Address Assignment section of the *FPA-1000 Installation and Operation Guide*.

Detectors connected to a sounder base can use only addresses 1 to 127. The sounder bases are addressed automatically by the panel, depending on the detector's address (detector address +127).

Technical specifications

Electrical

Mains power supply (primary)

• Supervision	Supervised for the presence of AC power
• Voltage	120 VAC, 60 Hz, 1.1 A maximum, or 240 VAC, 50 Hz, 0.6 A maximum

Power supply (secondary) with battery backup

• Voltage	24 VDC
• Supervision	Supervised for the presence of AC power
• Current consumption (standby)	1.25 A maximum
• Current consumption (alarm)	5 A maximum 1.0 A maximum shared between panel and SLC(s) <ul style="list-style-type: none"> • Panel \leq 250 mA • SLC 1 = 60 mA/card + 220 mA/loop maximum • SLC 2 = 60 mA/card + 220 mA/loop maximum 4.0 A maximum shared between NACs, Option Bus, and AUX power <ul style="list-style-type: none"> • NACs (non-synchronized) • NAC 1 = 2.5 A maximum • NAC 2 = 2.5 A maximum • NACs (synchronized) • NAC 1 + NAC 2 in total = 2.75 A maximum • Option Bus = 0.5 A maximum • AUX/FWR = 0.5 A maximum • AUX/RST = 0.5 A maximum
• Battery capacity	7.0 Ah minimum, 40 Ah maximum
• Charge current	2.0 A maximum
• Fuse	15 A blade-type
• Suitable battery type	Two 12 VDC in series (7 Ah or 18 Ah in enclosure, 24 Ah or 38 Ah in additional battery box) Recommended Manufacturers: POWER SONIC: PS-1270, PS-12170, PS-12180 YUASA: NP7-12, NPG18-12
• Maintenance	Replace batteries when they fail the Battery Load test

Auxiliary power supply

AUX/FWR Full Wave Rectified	500 mA at 24 V FWR (17 to 31 VRMS), non-switched, power-limited, unfiltered, non-supervised
AUX/RST Resettable	500 mA at 24 V FWR (17 to 31 VDC), switched, power-limited, filtered, non-supervised
Line impedance for ground fault detection (Option Bus, SLC, NAC, secondary power circuit, City Tie/Local Energy, AUX)	15 k Ω

Option Bus (OB)

Voltage	Nominal 12 VDC, power-limited, supervised
Current	500 mA maximum
Configuration	1 Class B
Circuit wiring distance	4000 ft. (1219 m) maximum, depending on wire gage and connected devices

Notification appliance circuits (NACs)

Mainboard NACs	Two (NAC 1 and NAC 2)
NAC power from panel	Nominal 24 V FWR (17 to 31 VRMS), regulated, power-limited, supervised 2.5 A per NAC, maximum current limited to overall 4.0 A shared among AUX power, Option BUS, and NACs
Line impedance	1.45 Ω maximum
Configuration	Two Class B or two Class A

Signaling line circuits (SLCs)

Voltage	Nominal 39 VDC (29 VDC to 40 VDC), power-limited, supervised
Current	204 mA (per FPE-1000-SLC)
Circuit resistance	<50 Ω
Circuit capacitance	<1 nF
Circuit inductance	<1 mH
Configuration	1 or 2 Class B or 1 Class A or 1 Class X

City Tie

Circuit resistance	65 Ω maximum
Wire gauge	12 AWG to 18 AWG (ISO 4 mm ² to 0.75 mm ²)

City Tie

City Tie - Local Energy Mode

Type of connection	In series
Alarm, trip coil	24 VDC
Alarm current	250 mA DC (momentary)
Supervisory/standby current	<50 mA DC
Trip coil resistance	14.5 Ω
Nominal coil voltage	3.65 VDC, power-limited, supervised

City Tie - Reverse Polarity Module

Nominal voltage	Nominal 24 VDC (26.4 VDC maximum), power-limited, supervised
Output current	33 mA maximum
Supervisory/standby current	5 mA

Networking cards

Current (per card)	FPE-1000-NE: 100 mA FPE-1000-NF: 170 mA FPE-1000-NW: 330 mA
Circuit wiring distance (actual length depends on connector quality)	FPE-1000-NE: 328 ft. (100 m) FPE-1000-NF: 6560 ft. (2000 m) or 10 db loss FPE-1000-NW: 3280 ft. (1000 m) maximum

Trademarks

All hardware/software product names used in this document are likely to be registered trademarks and must be treated accordingly.

Ordering information**FPA-1000-V2 Fire panel, 2 SLC & networking**

Advanced analog control panel listed by UL for central station, local, auxiliary, and remote station systems with networking capabilities allowing monitoring of up to 2,000 addressable points in one system.

Order number **FPA-1000-V2****FPA-1000-LC Fire panel, 2 SLC & networking, no encl.**

FPA-1000-UL Mainboard for use as a replacement board for system update or repair

Order number **FPA-1000-LC****FPA-1000-LT Analog/networkable panel, no transformer**

FPA-1000-V2 fire panel without transformer. For Latin America only.

Order number **FPA-1000-LT****Accessories****BATB-40 Battery box/enclosure, 22x20.75x7.25"**

Holds two dry or wet cell batteries. Optional BATB-SHELF battery shelf increases number of batteries. Suitable for residential/commercial fire or burglary applications.

Order number **BATB-40****BATB-80 Battery box/enclosure, 14x20.75x7.25"**

Battery box/enclosure with shelf holds up to four dry or wet cell batteries. Suitable for residential/commercial fire or burglary applications.

Order number **BATB-80****D102 Replacement key for D101 lock set**

The D102 is a replacement key for locks stamped with 1358.

Order number **D102****D5070 Analog point programmer, hand-held**

Used to program address settings on EEPROM-programmable analog devices

Order number **D5070****D7030X Annunciator, 8 alarm LED**

Eight zone LEDs indicate alarm conditions.

Order number **D7030X****D7030X-S2 Annunciator, 8 LED (2 supervisory)**

Two LEDs indicate supervisory conditions, six indicate alarm conditions.

Order number **D7030X-S2****D7030X-S8 Annunciator, 8 LED (8 supervisory)**

All eight zone LEDs (yellow) indicate supervisory conditions.

Order number **D7030X-S8****D7032 Annunciator expander, 8 LED**

Use with D7030X Family LED annunciators

Order number **D7032****D7035 Multiplex octal relay module**

Provide eight Form C relay outputs (w/o enclosure) for the D7024, FPD-7024, or FPA-1000 Fire Alarm Control Panels (FACP)

Order number **D7035****D7035B Multiplex octal relay module + enclosure**

Provide eight Form C relay outputs (w/ enclosure) for the D7024, FPD-7024, or FPA-1000 Fire Alarm Control Panels (FACP)

Order number **D7035B****D7048 Octal driver module, 12V**

Provides eight open-collector transistor outputs (current sinks) to FPA-1000, FPD-7024, or D7024 FACP's through the control panel's option bus.

Order number **D7048**

FAA-325-B4 Analog sensor base, 4"

Is combined with analog addressable detectors that use the advanced digital communication protocol to provide early fire warning for life safety and property protection

Order number **FAA-325-B4**

FAA-325-B6 Analog sensor base, 6"

6-inch (152.4 mm) base for FAH-325, FAI-325, and FAP-325 sensors. **US sales only**

Order number **FAA-325-B6**

FAA-325-B6S Analog sensor base with sounder, 6"

Contains an addressable sounder which provides an audible alarm in the immediate vicinity and only works in combination with one of the FAH-325, FAI-325, or FAP-325 analog sensors

Order number **FAA-325-B6S**

FAA-440-B4 Analog standard base, 4"

Standard 4-inch base. Used in combination with FAP-440 and FAH-440 detectors to provide early fire warning for life safety and property protection.

Order number **FAA-440-B4**

FAA-440-B4-ISO Analog isolator base, 4"

4-inch base with built-in isolator. Used in combination with FAP-440 and FAH-440 detectors to provide early fire warning for life safety and property protection.

Order number **FAA-440-B4-ISO**

FAA-440-B6 Analog standard base, 6"

Standard 6-inch base. Used in combination with FAP-440 and FAH-440 detectors to provide early fire warning for life safety and property protection.

Order number **FAA-440-B6**

FAA-440-B6-ISO Analog isolator base, 6"

6-inch base with built-in isolator. Used in combination with FAP-440 and FAH-440 detectors to provide early fire warning for life safety and property protection.

Order number **FAA-440-B6-ISO**

FAD-325-V2F Kit, analog duct housing w/ smoke head

Duct detector housing with an FAD-325-V2F-DH Analog duct smoke head. It's easy to install with a drill template. The steel sampling tube means there are no screens or filters to clean.

Order number **FAD-325-V2F**

FAD-325-V2F-DH Analog duct smoke head, 2-wire 24V

Replacement for the FAD-325-DH Analog duct smoke head for use in FAD-325, FAD-325-R, FAD-325-V2F and FAD-325-V2F-R Analog duct kits

Order number **FAD-325-V2F-DH**

FAD-325-V2F-R Kit, analog duct housing w/relays & head

Duct detector housing with an FAD-325-V2F-DH Analog duct smoke head and two sets of Form C alarm relays. It's easy to install with a drill template. The steel sampling tube means there are no screens or filters to clean.

Order number **FAD-325-V2F-R**

FAH-440 Analog heat detector head, fixed/ROR

Use with FAA-440 family bases and FAP-1000 Analog Addressable Fire Panels to provide general property protection

Order number **FAH-440**

FAP-325-V2F Analog Photo Detector Flat

Used to detect fast-flaming fires and dense smoke typically given off by plastic, foam, paper, wood, and other materials that tend to smolder

Order number **FAP-325-V2F**

FAP-440 Analog photoelectric detector head, 24V

Analog photoelectric smoke detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440**

FAP-440-T Analog photoelectric detector head, 24V

Analog photo/heat detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440-T**

FAP-440-TC Analog detector head, photo/heat/CO

Analog photo/heat/CO detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440-TC**

FAP-440-D Analog dual-photoelectric detector head

Analog dual-photoelectric smoke detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440-D**

FAP-440-DT Analog detector head, dual, photo/heat

Analog dual-photoelectric smoke/heat multi-sensor detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440-DT**

FAP-440-DTC Analog detector head, dual, heat/CO

Analog dual-photoelectric smoke/heat multi-criteria detector used with FAA-440 bases and FAP-1000 fire panels

Order number **FAP-440-DTC**

FCC-380 CO detector (Macurco CM-E1)

Carbon monoxide detector

Order number **FCC-380**

FLM-325-2I4 Dual input module for FPA-1000

Provides two independent contact monitoring circuits to monitor Normally Open (NO) or Normally Closed (NC) dry contact types of fire alarm devices

Order number **FLM-325-2I4**

FLM-325-2R4-2A Dual relay module, 2A

Provides 2 A current at two independently-controlled Form C contacts for a variety of Normally Open and Normally Closed applications, compatible with 254 addresses

Order number **FLM-325-2R4-2A**

FLM-325-2R4-2AI Dual relay module with isolator, 2A

Provides 2 A current with built-in short circuit isolator circuitry at two independently-controlled Form C contacts for a variety of Normally Open and Normally Closed applications, compatible with 254 addresses

Order number **FLM-325-2R4-2AI**

FLM-325-2R4-8A Dual relay module, 8A

Provides 8 A current at two independently-controlled Form C contacts for a variety of Normally Open and Normally Closed applications, compatible with 254 addresses

Order number **FLM-325-2R4-8A**

FLM-325-2R4-8AI Dual relay module with isolator, 8A

Provides 8 A current with built-in short circuit isolator circuitry at two independently-controlled Form C contacts for a variety of Normally Open and Normally Closed applications, compatible with 254 addresses

Order number **FLM-325-2R4-8AI**

FLM-325-CZM4 Conventional zone module for FPA-1000

Enables the FACP to interface and monitor up to 25 conventional devices depending on the device type such as two-wire smoke detectors or pull stations

Order number **FLM-325-CZM4**

FLM-325-I4-A Contact monitor, class A, 4"

Can be wired for Class A or Class B circuits, mounted to a cover plate for a 4-inch square or double gang electrical back box, bi-colored LED provides module status, compatible with 254 addresses

Order number **FLM-325-I4-A**

FLM-325-I4-AI Contact monitor with isolator class A 4"

Can be wired for Class A or Class B circuits, has built-in short circuit isolator circuitry, mounted to a cover plate for a 4-inch square or double gang electrical back box, bi-colored LED provides module status, compatible with 254 addresses

Order number **FLM-325-I4-AI**

FLM-325-IM Contact monitor for mounting in backbox

Allows compatible fire alarm control panels (FACP) to supervise Form A or B dry contact devices in a polling circuit

Order number **FLM-325-IM**

FLM-325-ISO Short circuit isolator for FPA-1000

Isolates a shorted section on a specific polling circuit from the rest of the system to minimize the loss of communication

Order number **FLM-325-ISO**

FLM-325-NA4 Supervised output module, Class A/B

Can be wired for Class A or Class B circuits, compatible with 254 addresses

Order number **FLM-325-NA4**

FLM-325-NAI4 Supervised output module, isolator, A/B

Built-in short circuit isolator circuitry, can be wired for Class A or Class B circuits, compatible with 254 addresses

Order number **FLM-325-NAI4**

FMM-325A Analog manual station, single, red

The single-action manual station is UL listed for commercial fire applications and meets Americans with Disabilities Act (ADA) requirements. Set the address on the polling circuit by programming an EEPROM microchip with the D5070 Analog point programmer.

Order number **FMM-325A**

FMM-325A-D Analog manual station, double, red

The double-action manual station is UL listed for commercial fire applications and meets Americans with Disabilities Act (ADA) requirements. Set the address on the polling circuit by programming an EEPROM microchip with the D5070 Analog point programmer.

Order number **FMM-325A-D**

FMR-1000-RA LCD annunciator FPA-1000 without control

LCD annunciator without system control capability for use with the FPA-1000 Analog Addressable Fire Panels

Order number **FMR-1000-RA**

FMR-1000-RCMD LCD annunciator FPA-1000 with control

LCD annunciator with system control capability for use with FPA-1000 Analog Addressable fire Panels

Order number **FMR-1000-RCMD**

FPE-1000-CITY Plug-in city tie module for FPA-1000

Provides the FPA-1000 Analog Addressable Fire Panels with two supervised City Tie Local Energy circuits or Reverse Polarity circuits

Order number **FPE-1000-CITY**

FPE-1000-NE Network card, 3-Ethernet

Ethernet Networking Card for peer-to-peer communication in an FPA-1000-V2 networked system

Order number **FPE-1000-NE**

FPE-1000-NF Network card, 1-Ethernet 2-fiber optic

Fiber Optic Networking Card for peer-to-peer communication in an FPA-1000 networked system

Order number **FPE-1000-NF**

FPE-1000-NW Network card, 1-Ethernet 2-wired

Wired Networking Card for peer-to-peer communication in an FPA-1000 networked system

Order number **FPE-1000-NW**

FPE-1000-SLC Plug-in SLC module for FPA-1000

Provides a Signaling Line Circuit (SLC) for connection of analog devices to the FPA-1000 Analog Addressable Fire Panels

Order number **FPE-1000-SLC**

FPM-1000-ENC Enclosure with dead-front door

Enclosure with dead front door

Order number **FPM-1000-ENC**

FPM-1000-SFMK Semi-flush mounting trim ring

The FPM-1000-SFMK Semi-flush Mounting Kit includes a trim ring and 4 screw covers.

Order number **FPM-1000-SFMK**

FPP-RNAC-8A-4C Power supply, RNAC 8A 24V

When connected to a panel's option bus, the FPP-RNAC-8A-4C adds four additional NFPA 72, Class B or Class A NACs. When connected directly to the NAC output, it is also a NAC power supply for fire-protective signaling systems.

Order number **FPP-RNAC-8A-4C**

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