



NYC Fire Dept.  
Certificate of Approval  
6155

7165-0328:0198

Product includes a 5 year warranty

**Features**

- 127 points expandable to 1,016 by use of seven SLCE cards
- 10 Amp Power Supply
- 6 NACs regulated, rated at 3 amps each
- 4 multifunctional input/output (I/O) circuits for flexibility rated at 1 amp each
- Strobe synchronization for Potter/AMSECO®, Gentex®, Cooper/Wheelock® and System Sensor®
- 1,500 Software zones for versatile installation options
- 4 x 40 LCD and keypad for ease of operation
- Dual P-Link communication circuits for annunciation and accessories
- Optional dual line digital alarm communicator reports by panel zone or point ID
- Ethernet port for programming, reporting and network connectivity
- E-mail system status, reports and event information
- Built-in IP communicator supports report by point, zone or panel

*Electrical Specs*

*AC Mains*

- 5.0 amps @ 120 VAC 50/60Hz
- 3.0 amps @ 240 VAC 50/60Hz

*Battery*

- 160 mA Standby
- 400 mA Alarm

**Description**

The PFC-6800 is a single loop expandable to eight loop analog/addressable fire alarm control panel. The panel utilizes the Potter/Nohmi device protocol that has a complete line of initiating and control devices. The SLC is capable of 50 ohms of resistance and does not require the use of twisted or shielded wire. The on board Signaling Line Circuit (SLC) supports 127 of any combination of smoke sensors, heat detectors or modules. Up to six additional SLC cards may be added in the control panel. Some or all of the SLC cards may be remotely installed to provide an additional 127 points bringing the total system capacity to 1,016 points.

The PFC-6800 has a metal cabinet with a key lock and a dead front standard. The cabinet will house 8 Ah or 18 Ah batteries and the panel has the power to charge up to 55 Ah batteries. The large LCD and window allows easy viewing of the system status and the standard LEDs. The keypad allows easy operation and navigation of the system menu.

The panel has auto-programming learn mode that will not affect the existing system when adding or deleting a device. The system is capable of 1,500 software zones, cross zoning and counting zones. The panel is fully programmed from a PC based software program that will work with Microsoft XP, Vista or Windows 7.0 operating systems.

The PFC-6800 has an Ethernet connection for programming network connectivity and IP reporting communicator. The system uses a simple patch cable for connecting a PC to the panel. In addition, the system may be connected to a building network and programmed while on the network. The system has a built in e-mail function and will send system E-mail reminders The IP communicator is listed with the Sur-Gard III IP receiver.

The panel will support P-Link devices which include: the RA-6075, RA-6500 and LED-16 Annunciators, RLY 5 Relay Module, SPG-1000 Serial Parallel Gateway (printer card), FCB-1000 Remote Ethernet/IP connection, DRV-50 LED driver for 50 LEDs, PSN-1000 Remote Power Supplies (10 Amp) and FIB-1000 P-Link Fiber Interface Module. In addition, the panel allows for the installation of the UD-1000 dual line telephone line digital alarm communicator transmitter (DACT). The UD-1000 is programmable for a single line or dual line and is compatible with Ademco's Contact ID or SIA DCS protocols.

The SLCE-127 may be installed with 6,500 feet of the control panel and may be installed in the AE-8 eight slot or AE-14 fourteen slot expansion cabinets. Another option is to install the SLCE-127 in the PSN-1000E intelligent power supply to allow remote installation of the loop adder and system synchronized notification circuits. Each PSN-1000 acts as a P-Link repeater and will repeat the communication to allow the installation of the remote loop thousands of feet from the main control panel.

The complete system may be converted to Class A with a CA-6500 module. The CA-6500 provides the hardware necessary to convert the remote annunciators through the Potter P-Link connection protocol, the NACs and the SLC to Class A operation.

### SLC Loop Accessories

The control panel may be connected with up to 1,016 addressable devices or modules in any combination. The SLC is not restricted by any special wire requirements and may be wired with any wire that complies with the NEC.

### SLC Loop Devices

Device	Description
PSA	Analog Photoelectric Smoke Detector with a listed obscuration of 1.02 to 3.83 percent per foot.
PSHA	Combination Analog Photo Electric Smoke/Heat Detector – a smoke detector with a listed obscuration of 1.02 to 3.83 percent obscuration and a fixed temperature 135° Fahrenheit heat detector
FHA	Analog Fixed Temperature Heat Detector that is selectable from 135° F to 185°F
RHA	Analog Rate or Rise Heat Detector that has a fixed temperature selection from 135°F and 174°F and also will alarm if the temperature increase 12-15°F in one minute
DDA	Addressable Duct Smoke Detector
AB-6	6" round base that is mounted to an electrical box and wired for connection of one of the above sensors
AB-4	4" round base that is mounted to an electrical box and wired for connection of one of the above sensors
AIB	Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop
ARB	Addressable Relay Base that contains two relays controlled by the SLC. One relay is rated at 8 amps at 240 VAC/30VDC and the other is rated at 2 amps 240 VAC/30 VDC
ASB	Addressable Sounder Base that contains an addressable sounder module that may be configured for local, group and all call. The sounder follows the pattern sent to the device.

### Modules

Device	Description
MCM	Miniature Contact Module provides a small foot print contact module for mounting inside an enclosure.
APS-SA	Single Action Addressable Pull Station
APS-DA	Dual Action Addressable Pull Station
SCM-4	Single Contact Module is a standard contact module with an LED that mounts into a 4" square electrical box.
DCM-4	Dual Contact Module is a device that can monitor two distinct inputs with a single device or in a Class A mode.
TRM-4	Twin Relay Module provides two form C relays that simultaneously active when the module is triggered by the control panel. Each relay is rated for 2 amps at 24VDC or 0.5 amps at 125VAC.
MOM-4	Monitored Output Module switches monitored power and is activated by the control panel.
CIZM-4	Conventional Input Zone Module is used to connect conventional smoke detectors.
SCI	Short Circuit Isolator interrupts a short on the SLC and prevents the short from affecting protected devices on the loop.

### P-Link Devices

Device	Description
RA-6075	LCD/keypad remote annunciator with a metal enclosure and key lock.
RA-6500	160 Character LCD. Keypad remote annunciator with metal enclosure and key lock.
LED-16	LED remote annunciator capable of displaying alarms, supervisory, and trouble status for 16 zones.
PSN-1000	10 Amp Intelligent power supply.
RLY-5	5 Form C Relay Card.
SPG-1000	Serial/Parallel Printer Card, Optional Rack Mount.
FCB-1000	Fire Communications Bridge, 1 may be added for remote IP Communicator.
FIB-1000	Fiber Interface Module, used in pairs to convert P-Link over multimode fiber, optional rack mount.

#### SLC Circuit Diagram

