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Inspections Division
Approved with Conditions

Date: 07/27/15

# Cerberus PRO Fire Safety

## 50-Point Addressable Fire Alarm Control Panel
## Model FC901

## ARCHITECT AND ENGINEER SPECIFICATIONS

- **An addressable fire alarm control panel (FACP) comprised of the following three (3) system components:**
  - Main board (Model FCM901-U3)
  - 170-Watt power supply (Model FP2011-U1)
  - System enclosure (Model FH901-U3 / R3)

- **System features:**
  - Supports 50 addressable devices on one (1) 'Class A', or one (1) – two (2) 'Class B' circuits
  - Includes one (1) 'Class A', or two (2) 'Class B' notification appliance circuits (NACs)
  - Built-in digital alarm communication transmitter (DACT)
  - Built-in RS–485 connection for remote annunciators
  - Resettable and non-resettable 24VDC auxiliary power
  - Optional connectivity to a leased-line / city-tie module
  - Off-normal warning message prior to reset
  - Fast and easy set-up with custom-configuration tool

- **Alphanumeric keypad**
  - for manual configuration

- **UL 864 9th Edition Listed; FM, CSFM & NYC Fire Department Approved**

### Product Overview

Model FC901 is an addressable FACP that provides a cost-effective solution for simple fire-alarm system applications.

Small and compact in design, Model FC901 is ideal for small fire-protection applications using less than 50 addressable devices:

- retail outlets / strip malls
- dry cleaner shops
- doctors' offices
- restaurants, etc.

With its built-in DACT and two (2) NACs, Model FC901 is powerful enough to economically meet the needs of these applications. Each 50-point FACP is FM, CSFM (Listing No.: 7165-0067:0259) and FDNY (Certificate of Approval: #6104) Approved.

### Specifications

The Model FC901 FACP consists of a main board (Model FCM901-U3); a 170-Watt power supply (Model FP2011-U1), and a Model FH901-U3 / R3 system enclosure. The programming software for Model FC901 is held in flash electrically erasable programmable read-only memory (EEPROM).

### Main Board

The Model FCM901-U3 main board provides system display and control, as well as connections for system field wiring, via removable terminal blocks.

The 3.5-inch (8.9 centimeters) by 1.5" (3.8 centimeters) liquid-crystal display (LCD) screen shows all system messages and event status. Each event may have a custom message up to 28 characters that describes the event's location.

The backlit LCD screen illuminates on any system event or manual key press. New, 'unacknowledged' events are indicated by a flashing exclamation point ('!'). Once 'acknowledged,' the exclamation point changes to a check mark ( '√'). A system-status line shows the quantity of events presently active.

The main board supports system-status light-emitting diodes (LEDs), based upon the following conditions of Model FC901:

- *Power*
- *Alarm*
- *Trouble*
- *Supervisory*
- *Ground Fault*

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**9813**
**FACP for simple-size buildings**

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## Specifications — (continued)

There are also LEDs to indicate when audible circuits are 'active' or 'silenced.' The main board supports four (4) system-control buttons, including: *Acknowledge*; *Alarm Silence*; *Unsilence*, and *Reset*.

The system offers an off-normal warning feature, alerting users when active devices are not ready for reset. These active devices may include manual stations that have not been reset; smoke detectors with smoke remaining in the optical chamber, etc.

Additionally, the main board supports an alphanumeric keypad, as well as navigation keys, which are used for scrolling maintenance functions and system configuration.

The main board supports connection for up to 50 addressable devices, via one (1) 'Class A', or one (1) to two (2) 'Class B' circuits. The loop supports all C-NET devices, including the Cerberus PRO Fire Safety and Model 'H'-series devices. The main board also supports one (1) 'Class A' or two (2) 'Class B' NACs.

Each NAC supports a maximum 2.5 Amps — with 2.5 Amps, max. allowed between the NACs. Each NAC can be set to a synchronized strobe, for horn-strobe devices, or for audible devices. Audible devices can be set for:

- 'STEADY'
- 'ANSI Temporal 3'
- 'March Time 30 / 60 / 120 Codes'

The main board supports four (4) 'Form C' relays for *Alarm*, *Trouble*, *Supervisory* and user-programmable events. Each relay is rated at 2 Amps at 30VDC maximum, resistive. The main board supports two (2) auxiliary 24VDC connections. Upon system reset, one (1) connection interrupts the power for five seconds for use with (4) four-wire conventional detectors. Each auxiliary-power output is 24VDC, nominal — rated at 0.75 Amps.

The main board contains a built-in DACT (Model FCA2015-A1), which provides communication between Model FC901 and with the central or remote monitoring station. The built-in DACT supports two (2) separate programmable accounts, as well as two (2) connections to the public-switched telephone network.

The connections support RJ31X male connectors.

The main board contains a battery-charging circuit, providing connection to lead-acid batteries rated at 24VDC, nominal. The main board can charge up to 18 AH batteries.

The main board contains a universal serial bus (USB) connector that supports connection for system configuration and module firmware upload, via the custom-configuration tool.

Model FC901 can be configu
configuration tool or manual
alphanumeric keypad on the
configuration feature creates a basic system configuration of all connected devices to accelerate initial system commissioning.

### 170-Watt Power Supply

The Model FCM901-U3 main board also supports connection to the system power supply. The 170-Watt power supply (Model FP2011-U1) incorporates a 4.0A, non-resettable slow-blow fuse on the primary input, and includes a built-in AC-line filter for surge and noise suppression. Model FP2011-U1 mounts in a standard Siemens — Fire Safety enclosure, and there are no serviceable Siemens — Fire Safety parts to be maintained.

### 50-Point Addressable System Enclosure

The Model FH901-U3 / R3 enclosure for the 50-point addressable fire system, Model FC901, supports all system modules. The enclosure also supports 12AH batteries.

**Note:** For systems requiring larger than 12AH batteries, use a UL Listed battery box.

The Model FH901-U3 / R3 enclosure for the 50-point panel is comprised of a dual-mounting setup that allows the main board to be partially mounted in a lower-to-upper position. When temporarily installed in the lower position, technicians are allowed more space to install field wiring at the time of system set-up. When field-wiring installation is complete, the main board shall be moved to the upper position for standard mounting prior to applying power to the system.

Additionally, the enclosure supports an optional battery bracket (Model FHA901-U1) that can be used to secure batteries up to 12AH. Model FHA901-U1 is required to comply with seismic certification, pursuant to ASC / SEI 7-05, Section 13.2.2.

A flush-mount trim kit (Model FHA902-U1 / R1) is also available for use when flush mounting Model FH901-U3 / R3.

### Optional Accessories

The Model FC901 FACP has the capability of operating an optional leased-line, city-tie module (Model FCI2020-U1) that provides a local-energy output for municipal call-box connection. The leased-line, city-tie module is installed on the back of the main board of the Model FC901 FACP, and all field wiring is connected to the main board.

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## Specifications — (continued)

Model FC901 contains a built-in RS–485 connection on the main board, thus eliminating the need for an additional communication module. The fire-system displays (FSD901-U3 / R3) are remote LED / LCD units that show the existing status of the Model FC901 FACP.

The Model FSD901-U3 / R3 optional display supports the following LEDs for system-status conditions:

- *Power*
- *Alarm*
- *Trouble*
- *Supervisory*
- *Ground-Fault*

There are also LEDs to indicate when audible circuits are 'active' or 'silenced.' The main board supports four (4) system-control buttons, including: *Acknowledge*; *Alarm Silence*; *Unsilence*, and *Reset*.

For Model FSD901-U3 / R3, a LED will illuminate for any given *Alarm*, *Supervisory* and *Trouble* Cerberus PRO-system event. A 3.5-inch (8.9 centimeters) by 1.5" (3.8 centimeters) LCD screen will give details of the event in alphanumeric form. The display screen can be scrolled to reveal additional events. Optional remote-system-control capabilities are also available.

The dimensions (based upon connection to a one-height-unit enclosure) for Model FC901 are as follows:

Approximate size: 16.25" (41.3 cm.) [H];
18" (46 cm.) [W];
5" (41.3 cm.) [D]

The weight (without operating unit or batteries) is approximately 9 Lbs [4082 g].

## Temperature and Hu

Model FC901 is ®UL 864 9th
indoor dry locations within a
120+/-3°F (49+/-2°C) to 32+/
relative humidity of 93+/-2% at a temperature of 90+/-3°F (32+/-2°C).

## Related Documentation

| Product | Data Sheet Number |
|---|---|
| 170-Watt power supply | 9806 |
| Leased-Line / city-tie module | 9810 |
| 50-Point Remote Annunciator | 9817 |

## Details for Ordering

| Model Number | Part Number | Description |
|---|---|---|
| FCM901-U3 | S54433-B101-A1 | Cerberus PRO Main Board {for 50-point FACP} |
| FP2011-U1 | S54400-Z59-A1 | 170-Watt Power Supply |
| FH901-U3 | S54433-B103-A3 | System Enclosure, Black {for 50-point FACP} |
| FH901-R3 | S54433-B103-A4 | System Enclosure, Red {for 50-point FACP} |

### Optional Accessories

| Model Number | Part Number | Description |
|---|---|---|
| FHA901-U1 | S54433-B107-A1 | Battery Bracket |
| FHA902-U1 | S54433-B106-A1 | Flush-Mount Trim Kit, Black |
| FHA902-R1 | S54433-B106-A2 | Flush-Mount Trim Kit, Red |
| FCI2020-U1 | S54400-A57-A1 | Leased-Line / City-Tie Module |
| FSD901-U3 | S54433-C102-A1 | System Display, Black {for 50-point system} |
| FSD901-R3 | S54433-C102-A2 | System Display, Red {for 50-point system} |

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**NOTICE** — The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The devices described here have specific instruction sheets that cover various technical, limitation and liability information.

Copies of these instruction sheets and the *General Product Warning and Limitations* document, which also contains important information, are provided with the product and, are available from the Manufacturer.

Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.