FPC-951(A) Addressable Multi-Criteria Photo/CO Detectors

**General**

FPC-951 and FPC-951A are intelligent, addressable smoke and carbon monoxide (CO) detectors with integral communication to provide point location for alarm communication and selective maintenance.

These detectors have point ID capability that enables each detector address to be set with rotary address switches providing exact device locations. The modern design and expanded color options support contemporary aesthetic demands. In addition, each detector is constructed for exceptional installation and maintenance efficiency.

FPC-951(A) is an intelligent, multi-criteria detector that incorporates photoelectric and carbon monoxide (CO) detection principles. FPC-951 offers a cost-effective solution meeting both the UL 268 7th edition standard for smoke detection and UL 2075 standard for system-connected life safety carbon monoxide detection. FPC-951A meets CAN/ULC-S529 and CAN/ULC-S588. The dual function of this single device makes it ideal for installations such as hotels, schools and high-rise residential applications that require both smoke and CO detection.

Released through the incomplete burning of various fuels, CO is a colorless, odorless and deadly gas that is virtually impossible to detect with the human senses. Because the potential exists for dangerous levels of CO to accumulate in almost any building, legislation mandating the use of CO detection in commercial spaces continues to grow.

FPC-951 is recommended for use in conjunction with the B200S series intelligent sounder bases. For Canadian applications, use B200SCOA series with FPC-951A. These bases can generate either a Temp 3 pattern for fire or a Temp 4 pattern for CO alarm indication. The B200S series bases recognize the System Sensor synchronization protocol. This enables it to be used as a component of the general evacuation signal — along with other System Sensor horns, horn strobes, and chimes — when connected to a power supply or Fire Alarm Control Panel (FACP) output capable of generating the System Sensor synchronization pulses.

**Features and Benefits**

- Combination smoke and CO detector
- Automatic drift compensation of smoke sensor and CO cell
- Uses only one address on the SLC
- RealTest® CO testing capability
- UL 268 7th edition and UL 2075 listed
- Canadian standards CAN/ULC-S529 and CAN/ULC-S588
- Separate audible signal for fire or CO alarm when used with a B200S/B200SCOA series base
- 10-year CO cell with end-of-life warning and fault
- New modern profile
- Expanded color options

**Detector Specifications**

**PHYSICAL SPECIFICATIONS**

- Height: 2.7 in. (69 mm) installed in B200S series sounder base
- Diameter: 6.875 in. (175 mm) installed in B200S series sounder bases
- Weight: 3.4 oz. (95 g)
- Color: White
- Operating Humidity Range: 15% to 90% Relative Humidity, Non-condensing
- Operating Temperature Range: 32°F to 122°F (0°C to 50°C)
- Air Velocity: 0 to 4000 ft./min. (0 to 1219.2 m/min.)

**ELECTRICAL SPECIFICATIONS**

- Operating Voltage Range: 15 to 32 VDC
- Operating Current @ 24 VDC: 200 uA (one communication every 5 seconds with green LED blink on communication)
- Maximum Alarm Current: 2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)
- Maximum Current: 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)
- Isolator Load Rating: 0.0063

**SYSTEM COMPATIBILITY**

- Communication Protocol: FlashScan®
- NFS2-3030: Firmware v27.0 or higher
- NFS2-640, NFS-320: Firmware v27.01 or higher

**CO MONITORING UL STANDARD REFERENCE: ALARM_THRESHOLDS**

<table>
<thead>
<tr>
<th>Parts Per Million</th>
<th>Detector Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 ± 5ppm</td>
<td>60 – 240 min.</td>
</tr>
<tr>
<td>150 ± 5ppm</td>
<td>10 – 50 min.</td>
</tr>
<tr>
<td>400 ± 10ppm</td>
<td>4 – 15 min.</td>
</tr>
</tbody>
</table>

Per UL standard 2075, the FPC-951(A) has been tested to the sensitivity limits defined in UL 2034/CSA 6.19-01.
### Product Line Information

#### PHOTO/CO DETECTORS
- **FPC-951**: Intelligent multi-criteria photo/CO detector, white, UL listed
- **FPC-951A**: Intelligent multi-criteria photo/CO detector, white, ULC listed

#### BASES
- **B501-WHITE**: 4" Mounting base, white, UL/ULC-listed
- **B501-WHITE-BP**: 4" Mounting base, white, UL/ULC-listed, bulk-pack 10
- **B501-BL**: 4" Mounting base, black, UL/ULC-listed
- **B501-IV**: 4" Mounting base, ivory, UL/ULC-listed
- **B300-6**: 6" Flanged mounting base, UL-listed, white
- **B300-6-BP**: 6" Flanged mounting base, UL-listed, white, bulk-pack 10
- **B300-6-IV**: 6" Flanged mounting base, UL-listed, ivory
- **B200S-WH**: Intelligent sounder base, white, UL-listed
- **B200S-IV**: Intelligent sounder base, ivory, UL-listed
- **B200S-SCOA-WH**: Intelligent sounder base for CO applications, white, ULC-listed
- **B200S-SCOA-IV**: Intelligent sounder base for CO applications, ivory, ULC-listed
- **B200S-LF-WH**: Intelligent sounder base, low-frequency, white, UL-listed
- **B200S-LF-IV**: Intelligent sounder base, low-frequency, ivory, UL-listed
- **B224BI-WH**: Intelligent isolator base, white, UL-listed
- **B224BI-IV**: Intelligent isolator base, ivory, UL-listed
- **B224RB-WH**: Intelligent relay base, white, UL-listed
- **B224RB-IV**: Intelligent relay base, ivory, UL-listed

#### ACCESSORIES
- **SMB600**: Surface Mounting Kit (flanged), ivory
- **TR300**: Trim ring, white
- **TR300-IV**: Trim ring, ivory
- **CK300-CO**: CO Color Kit (includes cover and trim ring), white
- **CK300-CO-IV**: CO Color Kit (includes cover and trim ring), ivory
- **CK300-CO-BL**: CO Color Kit (includes cover and trim ring), black
- **RA100Z**: Remote LED annunciator, UL-listed
- **RA100ZA**: Remote LED annunciator, ULC-listed
- **M02-04-00**: Detector test magnet
- **M02-09-00**: Telescoping test magnet

### Agency Listings and Approvals
These listings and approvals apply to the FPC-951 series. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.
- **UL**: S1115 (FPC-951)
- **ULC**: S1115 (FPC-951A)
- **CSFM**: 7272-0028:0510 (FPC-951)