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## CP355(A) Intelligent Addressable Ionization Detectors

Section: Addressable Devices

### GENERAL

The **CP355** addressable, low-profile, plug-in ionization detector uses a state-of-the-art ionization sensing chamber to provide open-area protection and is used exclusively with Fire-Lite's **MS-9200**, **MS-9200UD**, and **MS-9600** addressable Fire Alarm Control Panels (FACPs). The ionization detector is used to sense products-of-combustion and report the measured level of such products to the fire alarm control panel. Since this detector is addressable, it will help emergency personnel quickly locate a fire during its early stages, potentially saving precious rescue time while also reducing property damage. Two LEDs on each sensor light to provide a local, visible sensor indication. Remote LED annunciator capability is available as an optional accessory (P/N **RA400Z**).

### FEATURES

#### SLC loop:

- Two-wire loop connection.
- Unit uses base for wiring.

#### Addressing:

- Addressable by device.
- Direct Decade 01 – 99 (MS-9200, MS-9200UD) and 01 – 159 (MS-9600) entry of address.

#### Architecture:

- Unique single-source, dual-chamber design to respond quickly and dependably to a broad range of fires.
- Sleek, low-profile design.
- Integral communications and built-in type identification.
- Built-in tamper-resistant feature.
- Removable cover and insect-resistant screen for simple field cleaning.

#### Operation:

- Withstands air velocities up to 1,200 feet-per-minute (6.01 m/sec.) without triggering a false alarm.
- Factory preset at 1.5% nominal sensitivity for panel alarm threshold level.
- Visible LED "blinks" when the unit is addressed (communicating with the fire panel) and latches on in alarm.

#### Mechanicals:

- Sealed against back pressure.
- Direct surface mounting or electrical box mounting.
- Mounts to: single-gang box, 3.5" (8.89 cm) or 4.0" (10.16 cm) octagonal box, or 4.0" (10.16 cm) square electrical box (using a plaster ring).



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CP355

#### Other system features:

- Fully coated circuit boards and superior RF/transient protection.
- 94-V0 plastic flammability rating.
- Low standby current.

#### Options:

- Remote LED output connection (P/N RA400Z).

### APPLICATIONS

Use ionization detectors in life-safety applications to provide a broad range of fire-sensing capability, especially fast, flaming fires. Where smoldering fires are anticipated, a photoelectric sensor may provide faster response.

### CONSTRUCTION

These detectors are constructed of off-white LEXAN®. CP355 plug-in, low-profile smoke detectors are designed to commercial standards and offer an attractive appearance.

LEXAN® is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information, contact **Fire-Lite Alarms**, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll-Free FAX: (877) 699-4105.

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## INSTALLATION

CP355 plug-in detectors use a detachable mounting bracket to simplify installation, service and maintenance.

Mount base on box which is at least 1.5 inches (3.81 cm) deep. Suitable boxes include:

- 4.0" (10.16 cm) square box with plaster ring.
- 4".0 (10.16 cm) octagonal box.
- 3.5" (8.89 cm) octagonal box.
- Single-gang box.

**NOTE:** Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class B) wiring.

## OPERATION

Each CP355 uses one of 99 possible addresses on the MS-9200 and MS-9200UD Signaling Line Circuit (SLC), or up to 318 (159 on each loop) on the MS-9600 SLC. It responds to regular polls from the system and reports its type and status.

The CP355 addressable ionization sensor's unique unipolar chamber responds quickly and uniformly to a broad range of smoke conditions and can withstand wind gusts up to 1,200 feet-per-minute (6.01 m/sec.) without sending an alarm level signal. Because of its unipolar chamber, the CP355 is approximately two times more responsive than most ionization sensors. This makes it a more stable detector.

## SPECIFICATIONS

**Voltage range:** 15 – 32 VDC (peak).

**Standby current:** 300  $\mu$ A @ 24 VDC.

**LED current:** 6.5 mA @ 24 VDC (latched "ON").

**Air velocity:** 1,200 ft./min. (6.01 m/sec.) maximum.

**Diameter:** 6.1 inches (15.5 cm) installed in B350LP base.

**Height:** 2.1 inches (5.33 cm) installed in B350LP base.

**Weight:** 3.6 oz. (102 g).

**Temperature:** 0°C – 49°C (32°F – 120°F).

**Relative humidity:** 10% – 93%, non-condensing.

## PRODUCT LINE INFORMATION

**NOTE:** "A" suffix indicates ULC-Listed model.

**CP355** Addressable ionization detector (B350LP base included).

**CP355A** Same as above with ULC listing (B350LPA base included).

**RA400Z(A)** Remote LED. Mounts to a single-gang box.

**B350LP(A)** Plug-in detector base (included). **Dimensions:** 6.1" (15.5 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plastic ring, 4.0" (10.16 cm) octagonal box, 3.5" (8.89 cm) octagonal box, or single-gang box. All mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B224RB(A)** Plug-in System Sensor **relay** detector base. **Diameter:** 6.2" (15.75 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plastic ring, 4.0" (10.16 cm) octagonal box, or 3.5" (8.89 cm) octagonal box. All mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B501BH(A)** Plug-in System Sensor **sounder** detector base. **Diameter:** 6.0" (15.24 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plastic ring. Mounting box has a minimum depth of 1.5" (3.81 cm).