

CP355(A)

Intelligent Addressable Ionization Smoke Detectors



Addressable Devices

General

The CP355(A) 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 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 entry of address: 01 – 99 with MS-9200, MS-9200UD and MS-9200UDLS and 01 – 159 with MS-9600 and MS-9600UDLS.

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 (6.1 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).

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 Bayblend®. CP355(A) plug-in, low-profile smoke detectors are designed to commercial standards and offer an attractive appearance.



CP355 with B710LP base

Installation

CP355(A) plug-in detectors use a detachable mounting base 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(A) uses one of 99 possible addresses on the MS-9200 or MS-9200UD, or up to 318 (159 on each loop) on the MS-9600 Series Signaling Line Circuit (SLC). It responds to regular polls from the system and reports its type and status.

The CP355(A) 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(A) 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 µA @ 24 VDC.

LED current: 6.5 mA @ 24 VDC (latched “ON”).

Air velocity: 1,200 ft./min. (6.1 m/sec.) maximum.

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

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

Weight: 3.6 oz. (102 g).

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

Relative humidity: 10% – 93%, noncondensing.

Listings and Approvals

Listings and approvals below apply to the CP355(A) detector. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed, file S1059.
- ULC Listed, file S6963.
- CSFM approved: file 7271-0075:193.
- MEA approved: file 319-02-E.
- FM approved.

Product Line Information

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

CP355: Addressable ionization detector; B350LP base included.

CP355A: Same as above with ULC Listing, B3506P base included.

CP350: Plug-in detector base. **Dimensions:** 6.1" (15.5 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster 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).

B501: Flangeless mounting base.

B501A: Flangeless mounting base, ULC Listed.

B501BP: Flangeless mounting base, ULC Listed.

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 plaster 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).

B224BI(A): Plug-in System Sensor **isolator** detector base. Maximum 25 devices between isolator bases (*see DF-52389*). **Diameter:** 6.2" (15.75 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster 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-2: Plug-in System Sensor standard **sounder** detector base. **Diameter:** 6.0" (15.24 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster ring. Mounting box has a minimum depth of 1.5" (3.81 cm).

B501BHT-2: Plug-in System Sensor **temporal tone** sounder base.

B501BHA: Plug-in System Sensor standard **sounder** detector base, steady tone, with ULC Listing. Includes **B501** base.

B501BHTA: Plug-in System Sensor **temporal tone** sounder base, with ULC listing.

ACCESSORIES:

RA400Z(A): Remote LED annunciator. 3 – 32 VDC. Mounts to a U.S. single-gang electrical box. *For use with B501(A) and B350LP(A) bases only.*

SMK400E: Surface mounting kit provides for entry of surface wiring conduit. *For use with B501(A) base only.*

RMK400: Recessed mounting kit. *For use with B501(A) base only.*

M02-04-00: Test magnet.

M02-09-00: Test magnet with telescoping handle.

XR2B: Detector removal tool. Allows installation and/or removal of detector heads from bases in high ceiling applications.

XP-4: Extension pole for XR2B. Comes in three 5-foot (1.524 m) sections.

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For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.
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