NP-A100(A)
Addressable Multi Sensor Detector
For FireWarden Series Systems

General
The NP-A100(A) detector is an intelligent, addressable, multi-sensing, low-profile detector designed for use with FireWarden Series Fire Alarm Control Panels.

The NP-A100(A) detector uses a combination of photoelectric and thermal sensing technologies to increase immunity to false alarms. Unlike traditional intelligent detectors, the NP-A100(A) detector has a microprocessor in the detector head that processes alarm data. As a result, the NP-A100(A) detector adjusts its sensitivity automatically, without operator intervention or control panel programming.

Areas where the NP-A100(A) detector is especially useful include office complexes, schools, college campuses, manufacturing and industrial facilities, and anywhere else the use of a particular area may change. The NP-A100(A) detector automatically adjusts its sensitivity to the environment.

Features
- Automatically adjusts sensitivity levels without operator intervention or programming. Sensitivity increases with heat.
- Microprocessor-based, combination photo and thermal technology.
- Addressable-analog communication.
- Sleek, low-profile design.
- Two-wire SLC connection.
- Rotary, decimal addressing: 01-99 with FireWarden-100-2 and 01-50 with FireWarden-50.
- Addresses can be viewed and changed without electronic programmers.
- Dual bi-color LED design provides 360° viewing angle.
- Built-in tamper-resistant feature.
- Constructed of off-white fire-resistant plastic, designed to commercial standards, and offers an attractive appearance.
- SEMS screws for wiring of the separate base.
- Several base options, including relay, isolator, and sounder.
- Built-in functional test switch activated by external magnet.
- Listed to UL 268.

Specifications
Size: 2.0” (5.3 cm) high; base determines diameter.
- B210LP(A): 6.1” (15.5 cm) diameter.
- B501(A): 4.1” (10.4 cm) diameter.
- B200SR(A): 6.875” (17.46 cm) diameter.
- B224RB(A): 6.2” (15.748 cm) diameter.
Shipping weight: 5.2 oz. (147 g).
Operating temperature: 0°C to 38°C (32°F to 100°F).
UL-Listed velocity range: 0 – 4000 ft./min. (1219.2 m/min.), suitable for installation in ducts.
Relative humidity: 10% – 93% noncondensing.
Thermal sensing rating: fixed-temperature setpoint 135°F (57°C).

ELECTRICAL SPECIFICATIONS
Voltage range: 15 – 32 volts DC peak.
Standby current (max. avg.): 300 µA.
Loop resistance: 50 ohms maximum; varies according to control panel used. Refer to panel installation manuals.
LED current (max.): 6.5 mA @ 24 VDC (“ON”).

Installation
The NP-A100(A) plug-in detector uses a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove detectors without using a ladder. Suitable mounting base boxes include:
- 4.0” (10.16 cm) square box.
- 3.5” (8.89 cm) or 4.0” (10.16 cm) octagonal box.
- Single-gang box (except relay or isolator base).

NOTE: The NP-A100(A) detector has the unique ability to adjust sensitivity according to the environment, based on heat and smoke levels. Avoid installing these detectors in locations that are susceptible to rapid and high temperature changes. An example of an incorrect application would be near or in line with the output of a self-contained heater.

Agency Listings and Approvals
These listings and approvals apply to the modules specified in this. 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 Listed: S1115.
- ULC Listed: S1115.
- FM Approved.
- CSFM: 7272-0028:0258.
Ordering Information

NOTE: “A” suffix indicates ULC Listed model.

NP-A100: Low-profile intelligent multi-sensor detector.
NP-A100A: Same as NP-A100 but with ULC Listing.

INTELLIGENT BASES

NOTE: “A” suffix indicates ULC Listed model.
NOTE: For details about intelligent bases and their mounting, see DN-60054.

B210LP(A): Plug-in detector base (included); standard U.S. flanged low-profile mounting base.
B210LPBP: Bulk pack of B210LP; package contains 10.
B224RB(A): Relay base Screw terminals: up to 14 AWG (2.0 mm²). Relay type Form-C. Rating: 2.0 A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive.

ACCESSORIES

F110: Retrofit flange to convert B210LP to match the B710LP profile, or to convert older high-profile bases to low-profile.
F110BP: Bulk pack of F110; package contains 15.
F210: Replacement flange for B210LP(A) base.
RA100Z(A): Remote LED annunciator. 3 – 32 VDC. Fits U.S. single-gang electrical box. Supported by B210LP(A) and B501(A) bases only.
SMB600: Surface mounting kit for use with B210LP(A).
M02-04-00: Test magnet.
M02-09-00: Test magnet with telescoping handle.
XR2B: Detector removal tool. Allows installation and/or removal of Series detector heads from base in high ceiling installations.
T55-127-010: Detector removal tool without pole.
XP-4: Extension pole for XR2B. Comes in three 5-foot (1.524 m) sections.