NP-200 Series Photoelectric Smoke Detectors for FireWarden Series

The NOTIFIER® NP-200 Series intelligent plug-in smoke detectors are designed for both performance and aesthetics, and are direct replacements for the NP-100 Series. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards.

Exclusively for use with NOTIFIER’s FireWarden Series addressable fire alarm control panels, the NP-200 Series point ID capability allows each detector’s address to be set with rotary, decimal address switches, providing exact detector location for emergency personnel to 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.

The NP-200 Series also offers 135°F (57°C) fixed temperature thermal sensing on the NP-200T and a remote test capable detector on the NP-200R for use with DNR(A)/DNRW duct smoke detector housings.

Features

SLC LOOP:
• Two-wire SLC loop connection
• Unit uses base for wiring
• Compatible with FlashScan® and CLIP protocol systems
• Stable communication technique with noise immunity

ADDRESSING:
• Addressable by device
• Rotary, decimal addressing
(Refer to the FireWarden panel manuals for device capacity.)

ARCHITECTURE:
• Sleek, low-profile, stylish design
• Unique single-source design to respond quickly and dependably to a broad range of fires
• Integral communications and built-in device-type identification
• Built-in tamper resistant feature
• Remote test feature from the panel
• Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1 (FlashScan systems only)
• Built-in functional test switch activated by external magnet
• Removable cover and insect-resistant screen for simple field cleaning
• Expanded color options

OPERATION:
• Designed to meet UL 268 7th Edition
• Factory preset at 1.5% nominal sensitivity for panel alarm threshold level
• LED “blinks” when the unit is polled (communicating with the fire panel) and latches in alarm.
• Low standby current

MECHANICALS:
• Sealed against back pressure
• SEMS screws for wiring of the separate base
• Designed for direct-surface or electrical-box mounting
• Plugs into separate base for ease of installation and maintenance

• Separate base allows interchange of photoelectric, ionization and thermal sensors

OPTIONS:
• Optional relay, isolator, and sounder bases

Installation
NP-200 Series plug-in intelligent smoke detectors use a detachable base to simplify installation, service and maintenance. Installation instructions are shipped with each detector.

Mount detector base (all base types) on an electrical backbox which is at least 1.5” (3.81 cm) deep. For a chart of compatible junction boxes, see DN-60054.

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 only.

When using relay or sounder bases, consult the N100-ISO installation sheet I56-3625 for device limitations between isolator modules and isolator bases.

Construction
These detectors are constructed of fire-resistant plastic. The NP-200 Series plug-in intelligent smoke detectors are designed to commercial standards and offer an attractive appearance.

Operation
Each NP-200 Series detector uses one of the panel’s addresses (total limit is panel dependent) on the FireWarden Signaling Line Circuit (SLC). It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The NP-200 Series offers features and performance that represent the latest in smoke detector technology.

Detector Sensitivity Test
Each detector can have its sensitivity tested (required per NFPA 72, Chapter 14 on Inspection, Testing and Maintenance) when installed/connected to an FireWarden Series addressable fire alarm control panel. The results of the sensitivity test can be printed for record keeping.
Product Line Information

NOTE: “-IV” suffix indicates CLIP and FlashScan device.

NP-200: White, low-profile intelligent photoelectric sensor, FlashScan only
NP-200-IV: Ivory, low-profile intelligent photoelectric sensor
NP-200T: White, same as T but includes a built-in 135°F (57°C) fixed-temperature thermal device, FlashScan only
NP-200T-IV: Ivory, same as T but includes a built-in 135°F (57°C) fixed-temperature thermal device
NP-200R: White, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW, FlashScan only
NP-200R-IV: Ivory, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW

INTELLIGENT BASES

NOTE: For details on intelligent bases, see DN-60981.

B300-6: White, 6” base, standard flanged low-profile mounting base (CSFM: 7300-1653:0109)
B300-6-IV: Ivory, 6” base, standard flanged low-profile mounting base (CSFM: 7300-1653:0109)
B300-6-BP: Bulk pack of B300-6, package contains 10
B501-WHITE: White, 4” standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)
B501-BL: Black, 4” standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)
B501-IV: Ivory color, 4” standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)
B501-WHITE-BP: Bulk pack of B501-WHITE contains 10
B224RB-WH: White, relay base (CSFM: 7300-1653:0216)
B224RB-IV: Ivory, relay base (CSFM: 7300-1653:0216)
B224BI-IV: Ivory isolator detector base (CSFM: 7300-1653:0216)
B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (CSFM: 7300-1653:0238)
B200S-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (CSFM: 7300-1653:0238)

MOUNTING KITS AND ACCESSORIES

TR300: White, replacement flange for B210LP(A) base
TR300-IV: Ivory, replacement flange for B210LP(A) base
RA100Z(A): Remote LED annunciator, 3-32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501(A) and B300-6(A).
M02-04-00: Test magnet
M02-09-00: Test magnet with telescoping handle
CK300: Color Kit (includes cover and trim ring), white, 10-pack
CK300-IV: Color Kit (includes cover and trim ring), ivory, 10-pack
CK300-BL: Color Kit (includes cover and trim ring), black, 10-pack
SPECIFICATIONS

Sensitivity:
- UL Applications: 0.5% to 4.0% per foot obscuration.
- ULC Applications: 0.5% to 3.5% per foot obscuration

Size:
- B300-6: 6.1" (15.6 cm) diameter
- B501: 4" (10.2 cm) diameter

For a complete list of detector bases see DN-60981

Shipping weight: 3.4 oz. (95 g)

Operating temperature range:
- NP-200: 32°F to 122°F (0°C to 50°C)
- NP-200T Series: 32°F to 100°F (0°C to 38°C)
- NP-200R Series installed in a DNR/DNRW, -4°F to 158°F (-20°C to 70°C)

UL/ULC Listed Velocity Range: 0-4000 ft/min. (1219.2 m/min.), suitable for installation in ducts

Relative humidity: 10% – 93% non-condensing

Thermal ratings: fixed-temperature set point 135°F (57°C), rate-of-rise detection 15°F (8.3°C) per minute, high temperature heat 190°F (88°C)

ELECTRICAL SPECIFICATIONS

Voltage range: 15 - 32 volts DC peak

Standby current (max. avg.): 200µA @ 24 VDC (one communication every 5 seconds with LED enabled)

Max current: 4.5 mA @ 24 VDC (“ON”)

DETECTOR SPACING AND APPLICATIONS


Listings and Approvals

Listings and approvals below apply to the NP-200 Series detectors. 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/ULC Listing: S1115
- FM Approved
- CSFM: 7272-0028:0503

NOTIFIER
12 Clintonville Road
Northford, CT 06472
203.484.7161
www.notifier.com