



TR-ASD-PL3 SERIES

Addressable Photoelectric Smoke & Multi-Sensor Detectors

The TRIGA, TR-ASD-PL3 Series feature a modern design and expanded color options support a variety of contemporary aesthetic demands. In addition, each detector is constructed for exceptional installation and maintenance efficiency.

The TR-ASD-PL3 Series intelligent plug-in smoke detectors are designed for both performance and aesthetics. 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. The TR-ASD-PL3 Series detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level. Dual electronic thermistors add 135°F (57°C) fixed temperature thermal sensing on the TR-ASD-PTL3. The TR-ASD-PL3R is a remote test capable detector for use with TR-DNR Series duct detector housings.



TR-ASD-PL3

INSTALLATION

The TR-ASD-PL3 Series plug-in intelligent thermal detectors use a separate base to simplify installation, service, and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep.

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.

Note: When using relay or sounder bases, consult the TR-M500X installation sheet for device limitations between isolator modules and isolator bases.



FEATURES & BENEFITS

- Designed to meet UL 268 7th Edition
- Sleek and stylish contemporary design
- Stable communication technique with noise immunity
- Addressable by device
- Rotary, decimal addressing (Refer to the TRIGA panel manuals for device capacity)
- Two-wire SLC connection
- LEDs blink every time the unit is polled
- Integral communications and built-in device-type identification
- 360°-field viewing angle of the visual alarm indicators (two bi-color LEDs); LEDs blink green in Normal condition and turn on steady red in Alarm
- Remote test feature from the panel
- Built-in functional test switch activated by external magnet
- Walk test with address display (an address of 121 will blink the detector LED 12-(pause)-1)
- Low standby current
- Built-in tamper-resistant feature
- Designed for direct-surface or electrical box mounting
- Sealed against back pressure
- Plugs into separate base for ease of installation and maintenance
- Expanded color options
- SEMS screws for wiring of the separate base
- Optional remote, single-gang LED accessory
- Optional sounder, relay, and isolator bases

Note: Specifications are subject to change without notice.

OPERATION

Each TR-ASD-PL3 Series detector uses one of the panel's addresses (total limit is panel dependent) on the 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 TR-ASD-PL3 Series offers features and performance that represent the latest in smoke detector technology.

Technical Specifications

PHYSICAL / ENVIRONMENTAL

Sensitivity:

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

Size: 2.0" (51mm) high; base determines diameter

- TR-B300-6: 6.2" (15.6 cm) diameter
- TR-B501: 4.1" (10.2 cm) diameter

Shipping weight: 3.4 oz. (95 g)

Operating temperature range:

- TR-ASD-PL3 Series: 32°F to 122°F (0°C to 50°C)
- TR-ASD-PTL3 Series: 32°F to 115°F (0°C to 47°F)
- TR-ASD-PL3R Series installed in a TR-DNR/TR-DNRW:
-4°F to 158°F (-20°C to 70°C)

UL 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)

Spacing:

TR-ASD-PL3/TR-ASD-PL3R: Triga recommends spacing sensors in compliance with NFPA 72. In low air flow applications with smooth ceilings, space sensors 30 feet apart (9.1 m). For specific information regarding sensor spacing, placement, and special applications, refer to NFPA 72

TR-ASD-PTL3: Triga recommends spacing sensors in compliance with NFPA 72. In low air flow applications with smooth ceilings, space sensors 30 feet apart (9.1 m). When using the photoelectric and temperature sensors as a heat detector in FM3210 compliant applications, space sensors 20 feet apart (6 m). For specific information regarding sensor spacing, placement, and special applications, refer to NFPA 72

ELECTRICAL

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")

ACCESSORIES

TR-RA100Z: Remote 3 – 32 VDC LED annunciator, mounts to a U.S. single-gang electrical box, for use with TR-B501 and TR-B300-6 bases only.

ORDERING INFORMATION

TR-ASD-PL3: White, Addressable Photoelectric Smoke Detector

TR-ASD-PTL3: White, same as TR-ASD-PL3 but includes a built-in 135°F (57°C) fixed-temperature thermal device

TR-ASD-PL3R: White, low-profile intelligent photoelectric sensor, remote test capable, for use with TR-DNR/TR-DNRW

TR-B300-6: White, standard flanged low-profile mounting base

TR-B501-WHITE: White, standard European flangeless mounting base

TR-B200S-WH: White, Intelligent, programmable sounder base

TR-B200SR-WH: White, Intelligent sounder base for retrofit applications

TR-B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base

TR-B200SR-LF-WH: White, Low Frequency Intelligent sounder base for retrofit applications

TR-B224RB-WH: White, plug-in System Sensor relay base

TR-B224BI-WH: White, plug-in System Sensor isolator detector base

AGENCY LISTINGS AND APPROVALS

For exact certification listings for each model, please reference the respective agency website.

UL listed

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Note: Specifications are subject to change without notice.