

TR-ASD-LS3

High-Sensitivity Photoelectric Detector

GENERAL

The GEN2 Series, TR-ASD-LS3 is a high-sensitivity photoelectric smoke detector designed for Very Early Warning Fire Detection. It is used to protect valuable assets and operations, where systems must remain functioning at all times.

The high-sensitivity detector features a smoke-sensing chamber and patented optic block designed to amplify signals from smoke, but diminish stray internal reflections that can cause false alarms. New LED technology allows the GEN2 Series, TR-ASD-LS3 to achieve sensitivity levels from 0.02 percent-per-foot to 2 percent-per-foot obscuration – up to 25 times greater than a standard photoelectric detector. The extensive software processing includes multi-alert drift compensation, internal selfdiagnostics, and superior transient signal rejection algorithms to produce unprecedented stability at ultra-high sensitivities across the full temperature range. The GEN2 Series 3, TR-ASD-LS3 provides point identification of the fire location through addressability and offers complete supervision of both the wiring and detector.

The GEN2 Series, TR-ASD-LS3 detector complies with the following UL Standards:

- UL® 268 listed for Open Air Protection (0.5%/ft. to 2.0%/ft. obscuration)
- UL® 268 listed for Special Applications (0.02%/ft. to 0.5%/ft. obscuration)
- UL® 268A listed for Duct Applications allowing in duct TR-DNR and TR-DNRW duct smoke detectors

In addition, the new modern profile blends seamlessly with other GEN2 Series, detectors, and offers expanded color options that support contemporary aesthetic demands.

The GEN2 Series, TR-ASD-LS3 is the ideal detection solution for sensitive environments that cannot tolerate even small amounts of smoke:

- Telecommunications switching facilities
- Cellular telephone infrastructure
- Integrated circuit fabrication facilities
- Computer rooms
- Traffic control centers
- Data Centers

FEATURES & BENEFITS

- Provides superior EMI protection
- Applies a low standby current
- Uses Transient rejection algorithms
- Designed with Very Early Warning Fire Detection capability
- Contains rotary address switches
- Employs a Microprocessor design
- Supports Analog communications
- Has dual LEDs for 360° visibility
- Includes On-board drift compensation



TR-ASD-LS3



Note: Specifications are subject to change without notice.



Technical Specifications

PHYSICAL

Height: 2.0 inches (51 mm) installed in TR-B300-6 base
Diameter: 6.2 inches (156 mm) installed in TR-B300-6 base
4.1 inches (104 mm) installed in TR-B501-WHITE base
Weight: 3.4 oz (95 g)
Operating Temperature Range: 14°F to 140°F (-10°C to 60°C)
Operating Humidity Range: 10% to 93% relative humidity, non-condensing
Air Velocity: 0 to 4,000 fpm (0 to 1219 m/minute)
Isolator Load Rating: 0.0063
Self Diagnostics: Initiated by control panel
Activated by test magnet
Smoke Sensitivity: 9 levels: 0.02, 0.03, 0.05, 0.10, 0.20, 0.50, 1.00, 1.50, 2.00%/ft. obscuration (0.06, 0.10, 0.16, 0.33, 0.66, 1.65, 3.24, 4.85, 6.41%/m obscuration)
Drift Compensation: High sensitivity maintenance alert signal
Low sensitivity maintenance alert signal
Maintenance urgent signal
Spacing: 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

ELECTRICAL

Operating Voltage Range: 15 to 32 VDC
Operating Current: @ 24 VDC 300 µA
(one communication every 5 seconds with green LED blink on communication)
Maximum Current: 4.5 mA @ 24 VDC
(one communication every 5 seconds with amber LED solid on)
Maximum Alarm Current: 2 mA @ 24 VDC
(one communication every 5 seconds with red LED solid on)

STANDARDS

The GEN2 Series, TR-ASD-LS3, High Sensitivity Photoelectric Detector is designed to comply with the following standard:

UL Standard: UL 864.

ORDERING INFORMATION

DETECTOR

TR-ASD-LS3: High-Sensitivity Photoelectric Detector

BASES

TR-B501-WHITE: 4" Mounting base, white
TR-B300-6: 6" Flanged mounting base, white
TR-B200S-WH: Intelligent addressable sounder base, white
TR-B200S-LF-WH: Intelligent addressable sounder base, low-frequency, white
TR-B224BI-WH: Intelligent Isolator base, white
TR-B224RB-WH: Intelligent Relay base, white

ACCESSORIES

TR-RA100Z: Remote LED annunciator

AGENCY LISTINGS AND APPROVALS

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

UL Listed

TRIGA INVESTMENTS, LLC
340 Taxiway Bravo Beeville, TX 78102,
Tel: +1330-577-5199. Email: info@trigaglobal.com

Note: Specifications are subject to change without notice.