

SK-PTIR-W

Multi-Criteria Photo/Thermal/Infrared Detector

The SK-PTIR-W is an intelligent, multi-criteria detector that combines photoelectric, thermal, and infrared (PTIR) sensors in one unit to sense multiple components of a fire.

This multi-sensor approach on the SK-PTIR-W (replaces the SK-ACCLIMATE) enables enhanced sensitivity to real fire with heightened immunity to nuisance particulates. Multiple sensors and communication can greatly reduce nuisance alarms compared to single sensing methods. Sophisticated algorithms maximize the advantages of all four sensor types creating our best detection strategy offering heightened immunity to nuisance particulate and enhanced sensitivity to real fire.

- Photoelectric sensor detects airborne particles associated with smoke.
- Thermal sensor detects heat and rate-of-rise (135°F fixed temperature threshold).
- Infrared sensors discern light patterns in the environment as an additional data point for alarm determination.

This ability to reject certain nuisance alarm triggers, such as theater smoke, supports the use of the detector in applications where moderate to heavy nuisance conditions exist that might cause single sensing detectors to trigger a false alarm.

The PTIR detector meets both UL 268 7th edition and UL 521 listing requirements and can indicate distinct smoke and heat alarms. This dual nature supports a local alarm setting for photoelectric detection and a general evacuation setting based on thermal detection. This can minimize work interruptions in multi-level buildings.



FEATURES AND BENEFITS

- UL 268 7th Edition and UL 521 Listed
- Multi-criteria detection
- Analog communications
- Low standby current
- Rotary address switches
- Dual LEDs for 360° visibility
- New modern profile
- Expanded color options

SK-PTIR-W TECHNICAL SPECIFICATIONS

PHYSICAL/OPERATING

Dimensions:

- **Height:** 2.0 inches (51 mm) installed in B300-6 base
- **Diameter:** 6.2 inches (156 mm) installed in B300-6 base; 4.1 inches (104 mm) installed in B501-WHITE/-IV/-BL base
- **Weight:** 3.4 oz. (95 g)

Operating Humidity Range: 15% - 90% Relative Humidity, Non-condensing

Operating Temperature Range: 32°F - 100°F (0°C - 38°C)

Air Velocity: 0 - 300 ft/min. (0 - 91.4 m/min.)

ELECTRICAL

Operating Voltage Range: 15 to 32 VDC

Operating Current @ 24 VDC: 200 uA (one communication every 5 seconds with green LED blink on communication)

Maximum Alarm Current: 2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)

Maximum Current: 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)

Isolator Load Rating: 0.0063

STANDARDS

The devices in this datasheet meet the standards of UL 268 7th Edition.

AGENCY LISTINGS AND APPROVALS

The listings and approvals below apply to the SK-PTIR-W. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing status.

- UL: S6173
- FM Approved
- CSFM: 7272-0559:0517

ORDERING INFORMATION

SK-PTIR-W: Multi-criteria photoelectric, thermal and infrared smoke detector, white color

Bases:

B501-WHITE: 4" Mounting base, white

B501-WHITE-BP: 4" mounting base, white, 10-pack

B501-IV: 4" Mounting base, ivory

B501-BL: 4" Mounting base, black

B300-6: 6" Flanged mounting base, white

B300-6-BP: 6" Flanged mounting base, white, 10-pack

B300-6-IV: 6" Flanged mounting base, ivory

B200S-WH: Intelligent addressable sounder base, white

B200S-IV: Intelligent addressable sounder base, ivory

B200S-LF-WH: Intelligent addressable sounder base, low-frequency, white

B200S-LF-IV: Intelligent addressable sounder base, low-frequency, ivory

B224BI-WH: Isolator base, white

B224BI-IV: Isolator base, ivory

B224RB-WH: Relay base, white

B224RB-IV: Relay base, ivory

Accessories:

SMB600: Surface mounting kit (flanged)

TR300: Trim ring, white

TR300-IV: Trim ring, ivory

CK300-IR: IR color kit (includes cover and trim ring), white, 10-pack

CK300-IR-IV: IR color kit (includes cover and trim ring), ivory, 10-pack

CK300-IR-BL: IR color kit (includes cover and trim ring), black, 10-pack

RA100Z: Remote LED annunciator

M02-04-00: Detector test magnet

M02-09-00: Telescoping test magnet

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