

PRECISION

Multi-sensor Detector

VFD-400



Product Description

The PRECISION Multi-sensor Detector provides optimum photoelectric smoke sensing and heat detection. The detector can be configured for pure smoke detection, pure heat detection, or a combination of both, which makes it suitable for the widest possible range of applications.

The Multi-sensor Detector is designed for use with the PROACTIV Fire Alarm Control Panel (FACP) System. The detector contains a photoelectric smoke sensor and a thermistor temperature sensor, which are used in the determination of a fire event. The combination of signals from the two sensors is dependent on the response mode selected.

Function

The PRECISION Multi-sensor Detector can operate in five (5) different modes and are easily programmable from the PROACTIV FACP. The detector can report three (3) alarm conditions: ALERT, ACTION and ALARM.

The five modes allow for preset combinations of photoelectric smoke detection and heat detection: one mode uses pure heat detection, another uses pure smoke detection, and the remaining three modes use a combination of the two technologies.

Features

- Distributed Intelligence Architecture
- Broad detection performance making it suitable for a wide range of applications
- Five (5) individually programmable operating modes
- Three (3) alarm levels
 - Alert
 - Action
 - Fire Alarm
- False alarm rejection
- Automatic drift compensation
- LED status indicators
- Optional remote LED
- Fits 4 and 6 inch mounting bases
- PRECISION SLC device
 - Style 4, 6 or 7 wiring
 - Analog addressable
 - Priority Alarm reporting
 - Secondary conventional alarm reporting

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Operation

The signals from the photoelectric smoke sensing element and the temperature sensor are independent, and represent the smoke level and the air temperature respectively in the vicinity of the detector. These readings are combined based on the operating mode and converted to a digital format, which is processed to provide a digital value for transmission to the PROACTIV FACP when the device is polled.

The detector has two integral LED indicators, which can be illuminated by the FACP to indicate that the device is in alarm. The detector can be programmed to flash each time the device is polled.

If communication with the FACP is interrupted, the detector automatically switches to its conventional alarm reporting mode. When a fire is detected, the detector imposes an alarm signal on the SLC which is received by the FACP.

Ordering Information

PRECISION Devices

Description	Model	Description	Model
PRECISION LaserCOMPACT Detector	VLC-828	Remote Indicator	VFD-603
Photoelectric Smoke Detector	VFD-100	Switch Monitor Module	VFD-501
Ionization Smoke Detector	VFD-200	Priority Switch Monitor Module	VFD-502
Heat Detector	VFD-300	Mini Switch Monitor Module	VFD-506
Multi-sensor Detector	VFD-400	Priority Mini Switch Monitor Module	VFD-505
4-inch Mounting Base	VFD-000	Sounder Control Module	VFD-504
4-inch Relay Base	VFD-003	Input Output Monitor Module	VFD-503
4-inch 20D Isolator Base	VFD-004	Short Circuit Isolator	VFD-500
6-inch E-Z Fit Mounting Base	VFD-005	Short Circuit Isolator Base	VFD-001
6-inch Trim Ring	VFD-002	PRECISION Addressing Cards	PSP-2039

Note: Not all of the above products are available in all regions. Consult your local distributor or Xtralis office for more information.

Specifications

Device Type

PRECISION device

PRECISION SLC

Universal wiring bases support NFPA 72 Style 4, 6 and 7. Style 7 requires the use of isolators
Two-wire supply, polarity insensitive

Operating voltage

24 VDC

Quiescent current

470 μ A average 750 μ A peak

Alarm current, LED illuminated

3.47 mA

Alarm indicator

2 red LEDs
Optional remote LED

Operating Temperature

32°F to 140°F (0°C to 60°C)

Humidity

0 to 95% RH, non-condensing

Dimensions

4 inch (100 mm) diameter
2 inch (50 mm) height
2.3 inch (58 mm) height (in base)

Weight

Detector 3.7 oz (105 g)
Detector in base 5.6 oz (160 g)

Note: Specifications are typical at 24 V, 23°C and 50% relative humidity unless otherwise stated.

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