Axis AX UL Smoke Detector

The Axis AX UL Smoke Detector is our most advanced detector offering suitable for a wide range of applications. It uses Purelight® high-tech sensing technology that detects smoke particles entering the chamber and substantially reduces the possibility of false alarms.

Operation

The low profile design of the Axis AX Smoke Detector is sleek and evolutionary, with a 360º LED indicator which illuminates red when in alarm.

At the heart of the smoke sensor is Purelight® Sensing Technology which incorporates:

- Cone technology combined with a high-intensity infrared LED to provide stability and accurate sensitivity to smoke.
- A sophisticated dynamic algorithm, providing transient rejection and compensation for drift whilst maintaining accurate sensitivity.

The smoke chamber of the detector is a unique cone shape which serves to reduce any stray reflection. This ultra dark internal light chamber also contains a high-intensity infrared LED that is highly sensitive to smoke particles.

When smoke enters the chamber, infra-red light is scattered and registered by the photodiode and amplifier that are included in an application-specific integrated circuit (ASIC). This circuit ensures long term reliability, even in extreme conditions.

System compatibility

Axis AX detectors have been designed to operate on Discovery loops. This allows for Axis AX detectors and bases to operate on existing systems.

Maintenance and service

Axis AX detectors have been designed with a comprehensive set of features to support maintenance and service. Maintenance has to be done in accordance with all applicable standards. Clean the detector externally using a soft damp cloth.

Features

- Built-in isolator
- Purelight® optical technology for enhanced smoke detection and false alarm management
- Drift compensation
- Backwards compatible with Discovery
- Base locking mechanism (grub screw)
- In-built self test
- XPERT card addressing

Listings and Approvals

- Approved to UL268 7th edition, CSFM, ULC S529, FM3230

Please note: This detector is a direct replacement for the 58000-65AEL Axis AX Smoke Detector.

Specification

Digital communication protocol	Discovery
Supply wiring	Two wire supply, polarity sensitive
Sensitivity	1.2-2.1%/ft
Supply voltage (Vmin-Vmax)	17-28 Vdc
Sampling frequency	Once per second
Modulation voltage	5-9V peak to peak

Supervisory current	500 µA
Switch-on surge current	1.0 mA
Alarm/operated current, LED on	4.0 mA
Status indicator	Alarm - Red Fault - Flashing yellow Isolate - Yellow Poll - Flashing green
Additional remote LED current	5A maximum
Product operating temperature	32° F to 131° F (0° C to 55° C)
Effect of atmospheric pressure	None
Air velocity	0-300 fpm
Humidity	0% to 95% RH (no condensation or icing)
IP rating	IP44
Weight	2.93 ounces (83g)
Dimensions	4" (100mm) diameter x 1.42" (36mm height) 1.88" (48 mm) height with XPERT Intelligent Mounting Base
Materials	Housing: White flame-retardant polycarbonate. Terminals: Tin-plated stainless steel

All data is supplied subject to change without notice. Specifications are typical at 24 V, 73 ° F and 50% RH unless otherwise stated.

Isolated detector data

Maximum loop current (1c max; L1 in/out)	1A
Maximum series resistance (Z c max; L1 in/out)	100 mΩ

Order Codes and Options

SA5150-650ADV	Axis AX UL Smoke Detector
SA5000-210ADV	Axis AX UL Base - 4"
SA5000-230ADV	Axis AX UL Base - 6"

NB Built-in isolators for Axis AX Smoke and Multicriteria detectors only.

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