





# **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 360° 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

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Sampling frequency	Once per second
Modulation voltage	5-9V peak to peak
Supervisory current	500 μΑ
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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9564 Yellowhead Trail NW, Edmonton AB, T5G 0W4, Canada T: 1 (866) 462-7100 E: info@harding-tech.com W: www.harding-tech.com

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice.

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