

## Axis<sup>AX</sup>

### Intelligent Heat Detector

The low-profile Advanced Intelligent Heat Detectors have a common profile with the intelligent photoelectric and ionization detectors, but have a low air flow resistance case made of self-extinguishing white polycarbonate. Designed with a built-in dedicated microprocessor, the intelligent heat detector offers a wide range of capabilities to suit any commercial, industrial, or institutional application. Incorporating dual-alarm LEDs which illuminate red during alarm, the detector provides a complete 360° view of device status. The detector's dual-alarm LEDs can also be programmed for flashing during quiescent mode.

The Intelligent Heat Detector incorporates a unique industry method of addressing the detector. Each detector is individually addressed through its associated base by a patented address ("XPerT") card. The address is quickly and easily set by removing "pips" on the XPerT card according to a chart supplied with each base. Once the address is set on the XPerT card, it can be slid into place and locked into the detector base. By addressing the detector at the base rather than internally to the detector, the all-too-common errors associated with detector removal and maintenance are eliminated.



Each Intelligent Heat Detector is capable of being field programmed for one of five response/heat modes (see Table 1). All five response modes relate to different heat characteristics. Response modes 1, 2, and 5 are Static/Rate of Rise. Modes 3 and 5 are static only, with Mode 3 being default. Response mode settings of individual detectors are stored within the detector's memory. The advantage of storing this information in the detector rather than in the fire alarm control panel software is that the detector will maintain the programmed response/heat settings when power is removed from the detector. If the detector is powered down or inadvertently replaced in another location, the detector response/heat mode is not lost.



#### Unique Features:

- Patented XPerT Detector Base Addressing
- Built-in Dedicated Microprocessor
- Five Selectable Response/Heat Modes
- 135°F to 200°F Static/Rate of Rise
- Sub-Addressing of Ancillary Functions
- Dual-Alarm LEDs with 360° View

#### Features:

- Automatic Detector Testing w/Maintenance Alert
- Sub-Addressable Remote LED Output
- Optional Relay and Isolator Bases
- Superior Rejection of Transient Signals
- Detector to Base Locking Mechanism
- Plastic Dust Cover for Construction Protection
- 100% Digital Communication Protocol
- Integral XPerT Card Address Labeling Tab

#### Listings and Approvals:

- ETL ANSI/UL 864 Listed: 101564744NYM-001
- UL file: UOXX.S5053 / ML file: S24459
- CSFM Approved: 7270-1713:105
- NYC MEA: 294-95-E-4

**Table 1**

Response Mode	Sensitivity Characteristics
1	Ordinary 135°F Static / Rate-of-Rise
2	Ordinary 150°F Static / Rate-of-Rise
3	Ordinary 150°F Static
4	Ordinary 200°F Static / Rate-of-Rise
5	Intermediate 200°F Static

**Table 2**

Warehouse Restaurant					Loading Bay Parking Garage					Kitchen; Laundry & (enclosed & ventilated)					Boiler Rm					
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
✓	✓				✓	✓						✓	✓	✓				✓		✓

1, 2, 3, 4, 5 = Response/Sensitivity Modes  
 ✓ = Mode Suitable for Installation

Another unique industry feature of the Advanced Intelligent Heat Detector, in conjunction with the Axis<sup>AX</sup> Series Intelligent Fire Alarm Control Panel, is its ability to sub-address detector base ancillary functions. Each Intelligent Heat Detector is capable of incorporating, based on optional intelligent base utilization, a remote LED and/or relay. When these options are utilized, the user is capable of sub-addressing each of these options (remote LED and/or relay) to activate independently of the intelligent heat detector. This provides 100% free programmability of the detector base outputs to meet the demanding requirements of today's installations. (For further explanation, refer to Intelligent Detector Bases and Intelligent Isolator data sheets).

**Ordering Information**

58000-450ADV Intelligent Heat Detector

\* Refer to Intelligent Detector Bases and Intelligent Isolator data sheets for specific information.

**Intelligent Heat Detector Specifications**

Voltage	17-28 VDC
Modulation Voltage	5-9 VDC
Operating Current	
Quiescent	0.5 mA
Alarm	0.5 mA
w/LED's	5.5 mA
Surge Current	1.0 mA
Sensitivity - Heat	135°F, 150°F, 200°F
Environment	Indoor, Dry
Ambient Temperature	32-150° F (0-65° C)
Humidity	10-93% (non-condensing)
Dimensions	4" x 1 7/8"
Weight	3.7 oz
Housing	Polycarbonate, 94 V0

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



Advanced Fire Systems Inc  
 100 South Street, Hopkinton, MA 01748

Tel: (508) 435-9995  
 Fax: (508) 435-9990  
 Email: usa@advancedco.com  
 Web: www.advancedco.com