

AS2010-00

ADDRESSABLE FIXED TEMPERATURE / RATE OF RISE HEAT DETECTOR



Standard Features

- Low Profile - Only 2.0" high, including base
- Simple and reliable device addressing
- 2 in 1: Fixed Temperature / Rate of Rise Detector
- Uses the noise-immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Two built-in power/alarm LEDs
- Programmable non-polling LEDs
- Rate of rise temperature threshold: 15°F/Min (determined by panel)
- Adjustable threshold temperature: 135°F to 190°F
- UL maximum spacing of 70 feet

NOTE: Bases are not included with detectors, please order separately.

Application

The AS2010 Fixed Temperature / Rate of Rise sensors provide accurate temperature measurement data to the fire alarm control panel. These sensors are well-suited for environments where dust, cooking fumes or other factors make the use of smoke sensors impractical.

Operation

The AS2010 incorporates a highly linear thermistor circuit. The specially designed cover protects the thermistor while allowing maximum air flow. The thermistor circuit produces a voltage proportional to the temperature; this information is transmitted to the control panel as a digital value. When the ambient temperature exceeds a preprogrammed threshold (fixed temp or rate of rise), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor's fixed temperature threshold for different installation requirements.

Up to 127 devices may be installed on each SLC loop. The sensor address may be set by a hand-held programming unit. The sensor mounts to an electronics-free base and incorporates a locking mechanism for security. The base provides mounting slots, terminals for field wiring and a third terminal for a remote indicator/ LED. The sensor has dual LEDs for easy viewing of the sensor status.

Sensor Spacing

Heat sensor spacing shall be in compliance with NFPA 72. The distance between heat sensors shall not exceed their listed spacing or all points on the ceiling shall have a sensor within a distance equal to or less than 0.7 times the listed spacing. Heat sensors shall be located within a distance of one-half the listed spacing, measured at right angles from all walls or partitions extending upward to within the top 15 percent of the ceiling height. For additional instructions see NFPA 72.

Engineering Specification

Heat sensors are installed in accordance with NFPA (National Fire Protection Association) 72, the UL Listed Spacing Requirements and the rules and regulations set forth by the local authorities having jurisdiction.

The contractor shall furnish and install, where indicated on the plans, Fixed Temp / Rate of Rise Automatic heat sensors.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP). The base shall permit direct interchange with the Avenger AS2011 photoelectric smoke sensor, AS2010 heat sensor, and the AS2012 / AS2014 Multi-Criteria sensors.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

It shall be possible for the control panel to perform a functional test of the sensor without heat. The test method shall simulate the effects of heat on the device to insure testing of internal circuitry.

Bases

The AS7001 and the AS7002 mounting bases are electronics free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

Technical Specifications

Operating Voltage	17 - 41 VDC
Standby Current	350µA
Alarm Current	500µA
Transmission Method	DCP (Digital Communication Protocol)
Operating Temperature	14°F to 122°F (-10°C to 50°C)
Maximum Humidity	Up to 95% non-condensing
UL Temperature Range	135°F to 190°F (57.2°C to 87.8°C)
Rate of Rise	15° F/Min. (8.3° C/Min.)
UL Maximum Spacing	70 Feet
Color and Case Material	Bone / White - ABS Blend
Weight	3.2 oz. (4.9 oz with 4" base)

Ordering Codes

AS2010-00	Addressable Heat Detector
AS7001-00	4" Addressable Base
AS7002-00	6" Addressable Base
AS7003-00	4" Addressable Base with built-in Isolator
AS7004-00	6" Addressable Base with built-in Isolator
AS7005-00	Low Frequency Sounder Base
AS7008-00	Sounder Base
AS8201-00	Round Shape Remote LED Indicator
AS8202-00	Square Shape Remote LED Indicator