

Features

AutoPulse Analog EAS-1 heat sensors provide:

- Digital transmission of analog sensor values via IDNet two-wire communications
- Epoxy encapsulated electronic thermal sensor design, high temperature, high humidity design
- Rate-of-rise and fixed temperature sensing
- Electronic activation of connected sprinkler head
- Listed to UL 521 / ULC S530

For use with the AutoPulse EAS-1 series systems:

- EAS-1 control panels
- 200-point addressable device IDNet Sprinkler Loop with an electrically isolated output channel allowing use with either shielded or unshielded, twisted or untwisted single pair wiring; and providing dual short circuit isolating output loops

Fire alarm control panel provides:

- Peak value logging
- Automatic environmental compensation, multi-stage alarm operation, and display of sensitivity directly in degrees Fahrenheit
- Ability to clearly display and print detailed sensor information

General features:

- Operation is intended for ceiling mounting adjacent to sprinkler head
- Patented thermistor cage design enhances heat capture by directing airflow to surface of thermistor
- Designed for EMI compatibility
- Magnetic test feature is provided
- Captive stainless-steel mounting screws enables simple sensor mounting to standard weather-proof electrical boxes

Digital Communication of Analog Sensing. AutoPulse EAS-1 analog heat sensors provide an analog measurement digitally communicated to the host control panel using IDNet 2 addressable communications.



Figure 1: 4098-9748 Heat Sensor Mounted on weather-proof backbox

Corrosion Resistant The 4098-9748AR heat sensors have been tested in accordance with outdoor usage criteria which included wet location tests (e.g. rain testing) and more stringent corrosion test criteria (e.g. salt fog testing) which aligned with the types and severity of tests typically conducted as part of a UL199 and/or UL1767 sprinkler listing program.

Sensor Alarm and Trouble LED Indication. Each sensor integral LED pulses to indicate communications with the panel. LED is turned on steady for troubles and when the sprinkler is activated. During a system alarm, the control panel will control the LEDs such that an LED indicating a trouble will return to pulsing to help identify the alarmed sensors.

Mounting Reference

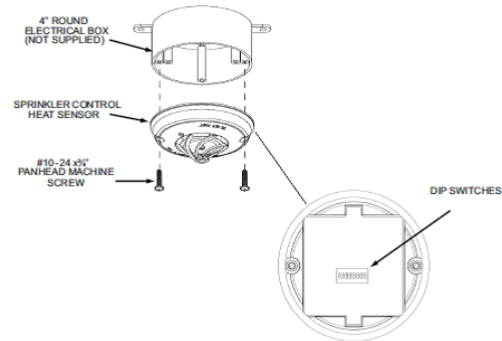


Figure 2: Mounting reference

Fixed Temp. Setting	UL Spacing	Note
155°F / 175°F* (57.2°C / 88°C) RoR-20°F / min.	Refer to UL Listing for details	Refer to system design documents for further spacing guidelines. Refer to Installation instruction document 579-1215AR for more details.

WARNING: In most fires, hazardous levels of smoke and toxic gas can build up before a heat detection device would initiate an alarm. In cases where life safety is a factor, the use of smoke detection is highly recommended.

The EAS-1 system is to be designed, installed and maintained in accordance with the requirements of Tyco Data Sheet TFP 360 *Electronic Sprinkler System for Storage Applications* and the applicable codes and standards of the National Fire Protection Association (NFPA), in addition to the standards and requirements of any authorities having jurisdiction. Applicable NFPA standards include NFPA 13, NFPA 20, NFPA 24, NFPA 25 and NFPA 72. Specific design, installation and maintenance criteria that deviate from the applicable prescriptive codes and standards are explicitly addressed in TFP 360.

Specifications

General Operating Specifications	
Communications and Sensor Supervisory Power	IDNet communications, auto-selected, 1 address per base
Communications Connections	Screw terminals for in/out wiring, 18 to 14 AWG (0.82 mm ² to 2.08 mm ²)
Remote LED Alarm Indicator Current	1 mA typical, no impact to alarm current
Remote LED Alarm Indicator and Relay Connections	Color coded wire leads, 18 AWG (0.82 mm ²)
UL Listed Operating Temperature Range	32° F to 100°F (0° to 38°C)
Operating Temperature Range with 4098-9748 Heat Sensor	32°F to 150°F (0° to 66°C)
Storage Temperature Range	10 to 95% RH
Humidity Range	0-4000 ft/min (0-1220 m/min)

Product Selection Chart

Device	
4098-9748AR	Sprinkler Control Heat Sensor
4100-3113AR	IDNet 2 sprinkler control SLC card