

Intelligent Addressable Sensors



ULCAP320 - Optical Sensor



ULCAPT340 - Photo-Thermal



ULCAH330 - Multi-Mode Heat Sensor

ULCAP320 - Optical / ULCAPT340 - Photo-Thermal / ULCAH330 - Multi-Mode Heat

Overview

This range of UL intelligent addressable sensors have been specifically designed to operate with Cooper UL Listed range of intelligent addressable fire systems.

The optical sensor (ULCAP320) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

The photo-thermal sensor (ULCAPT340) will respond quickly to fast clean burning fires yet maintain the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold which provides a greater rejection of false alarms. The sensor will also raise an alarm at temperatures exceeding 135°F.

The heat sensor (ULCAH330) can be set to one of 3 modes 135°F / 194°F and rate of rise. These sensors are designed to be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Features

- Soft addressed
- Integral short circuit isolator
- Single address
- Wide range of sensor types
- 360° visibility LED using lightpipe technology
- Drift compensation
- Removable detector chamber
- Aesthetically pleasing

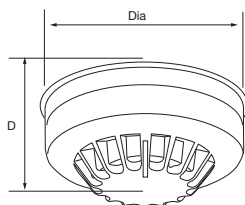
Benefits

- Quick and simple to install
- Single "multi-mode" heat sensor
- Wide viewing angle for increased LED visibility
- Common mounting base
- Positive "lock" indication
- Discreet design for incorporation into any decor
- Easy to maintain/service

Technical Specification

Code	ULCAP320	ULCAPT340	ULCAH330
Description	Addressable Sensor, Optical	Addressable Sensor, Photo-Thermal	Addressable Sensor, Multi-Mode Heat
Standards	UL268	UL268	UL521
Supply Ratings			
Working Voltage	18V dc to 30V dc	18V dc to 30V dc	18V dc to 30V dc
Voltage Waveform	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz
Standby Current	220 μ A (average)	220 μ A (average)	220 μ A (average)
Alarm Current	5mA (max)	5mA (max)	5mA (max)
Timings			
Start-up Time	2 seconds	2 seconds	2 seconds
Reset Time	2 seconds (max)	2 seconds (max)	2 seconds (max)
Sensitivity			
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft	N/A
Sensitivity Checker	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL
Heat Class			
Heat Element Rating	N/A	135°F	135°F ROR + Fixed, + Fixed 135°F Fixed, 194°F Fixed
Heat Detector Spacing	N/A	50ft (heat alone operation)	50ft
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Environmental			
Operating Temperature	32°F to 100°F	32°F to 100°F	32°F to 100°F / 32°F to 150°F (194°F setting)
Compatibility			
Compatibility Identifier	W002	W002	W002
Compatible Bases	WBA or UCAB300	WBA or UCAB300	WBA or UCAB300
Suitable for use with	Cooper UL fire systems	Cooper UL Fire Systems	Cooper UL Fire Systems

Dimensions



Description	Dia (mm)	D (mm) (excl base)	D (mm) (incl base)
Optical	101	33	45
Photo-Thermal	101	43	55
Multi-Mode Heat	101	43	55

Note: The above dimensions are with UCAB300 base

Installation

1. Sensors are fixed and wired via common mounting base (UCAB300).
2. Cable entry into base can be rear or side.
3. A locking facility is provided which can be activated if required to prevent unauthorised sensor removal without the use of a special tool.

Note: For wiring information please see UCAB300 base.

User Interface

1. LED indicates detector status, can be set to flash to confirm communication with control panel, illuminates continuously under fire conditions.
2. All wiring connections are via a common mounting base (ordered separately).

Product Codes

Code	Description
ULCAP320	Intelligent Addressable Sensor, Optical
ULCAPT340	Intelligent Addressable Sensor, Photo-Thermal
ULCAH330	Intelligent Addressable Sensor, Multi-Mode Heat
UCAB300	Intelligent Addressable Standard Base