ULCAP320, ULCAPT340
Intelligent addressable sensor



Left to right: Photoelectric smoke sensor, opto-heat sensor

Our UL range has multiple options for intelligent addressable sensors. All sensors are designed for optimum functionality in mid-large sized builds. They are all soft addressed and have integral short circuit isolators.

All UL addressable sensors are specifically designed for compatibility with the UL addressable sensor base (UCAB300) and UL addressable sounder base (ULCAS380).

Details of the two sensors are included over the page.

Features and benefits

- Built-in short circuit isolators
- Stylish low profile design
- 360° viewable LED design
- Removable detector chamber
- Drift compensation
- Plug and play, no hard addressing required
- 'Clean me' feature means sensor can be cleaned on site using the Eaton manual cleaning procedure

Optical smoke sensor (ULCAP320)

Suitable for most applications. Fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

Opto-heat sensor (ULCAPT340)

Responds quickly to fast clean burning fires. Maintains the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold, providing greater rejection of false alarms. The sensor will also give an alarm at temperatures above 135°F.

For opto-heat and photoelectric operation the sensor automatically compensates for gradual increase in the scatter signal due to contamination e.g. dust build up.

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Technical specification

Code	ULCAP320	ULCAPT340
Description	Addressable sensor, photoelectric	Addressable sensor, opto-heat
Standards	UL268	UL268, UL521
Supply ratings		
Working voltage	18 V dc to 30 V dc	18 V dc to 30 V dc
Voltage waveform	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz
Standby current	220 µµA (average)	220 µµA (average)
Alarm current	5 mA (max)	5 mA (max)
Timings		
Start-up time	2 seconds	2 seconds
Reset time	2 seconds (max)	2 seconds (max)
Sensitivity		
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft
Sensitivity checker	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL
Heat class		
Heat element rating	N/A	135ºF
Heat detector spacing	N/A	50ft (heat alone operation)
Physical		
Mounting position	Ceiling in open areas	Ceiling in open areas
IP rating	IP40	IP40
Environmental		
Operating temperature	32ºF to 100ºF	32ºF to 100ºF
Compatibility		
Compatibility identifier	W002	W002
Compatible bases	UCAB300	UCAB300
Suitable for use with	Eaton UL fire systems	Eaton UL fire systems
Dimensions		
Diameter (mm) (incl base)	104	104
Depth - D1 (mm) (incl base)	45	55
Depth - D2 (mm) (excl base)	33	43
Performance		
Heat element rating	N/A	135°F
Heat detector spacing	N/A	50ft (heat alone operation)
Heat class	N/A	A2S

LEDs

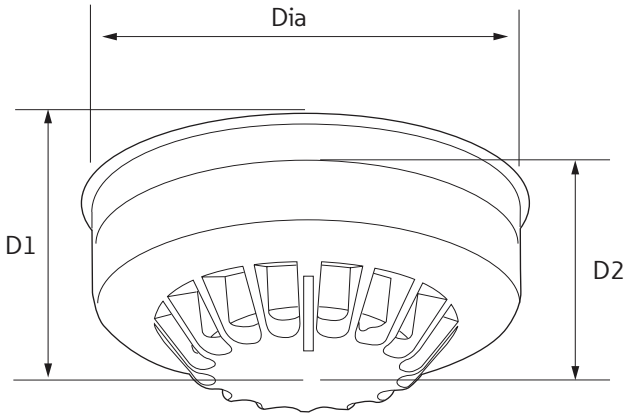
LED state	LED state behaviour	System event
Off	LED is not illuminated.	Global flash is disabled**.
Slow flash	Momentary flash approximately once every 30 seconds*.	Global flash enabled. Detector is in quiescent state.
Fast flash	Momentary flash approximately 25 times per minute*.	>24 detectors are in fire state.
On	LED is constantly illuminated.	Detector is in fire state.

*Timing can vary depending on loop address quantities.

**Detector flash in quiescent state can be disabled via control panel menu (ULCF3000).

Catalogue numbers

Description	Code
ULCAP320 Optical smoke sensor	400005FIRE-0011X
ULCAPT340 Opto-heat sensor	400006FIRE-0012X
Addressable sensor base	UCAB300
Addressable sounder base	ULCAS380



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