K·SystemUL
Addressable Fire Detection

KSU-OPT-7

Analog Photoelectric Smoke Detector – 7th Edition

Features

- UL268 7th edition listed
- FM (Factory Mutual) approved
- Multi-spectrum smoke categorization technology
- Early detection of smoke
- Designed to resist unwanted alarms from nuisance alarm sources
- 360° visibility status LED
- Hochiki DCP communication protocol
- Vandal resistant security locking feature

Description

KSU-OPT-7 is a Hochiki protocol photoelectric smoke detector, UL268 7th edition listed. The detector can be used in all open areas where photoelectric smoke detectors are required and is suitable for monitoring smoke in HVAC ducts.

KSU-OPT-7 is compatible with Kentec's UL listed Taktis and Elite RS fire alarm control panels.

Utilizing the newly developed "Multi-spectrum smoke categorization technology" the detector is designed for early detection of smoke while reducing unwanted alarms from cooking or other unwanted nuisance sources. The detector uses light scatter of IR (Infra-Red) and blue LED light to determine the level of smoke density within the detection chamber. The detector contains a unique baffle design which allows smoke to enter the chamber while preventing external light from affecting the internal photodiode.

The detector has a status LED which is visible through 360°, this LED will flash green when polling and will be continuous red in alarm. The LED can be configured as polling or non-polling through the LE2 control panel configuration software.

KSU-OPT-7 occupies a single Signaling Line Circuit (SLC) address which is configured by using the TCH-B200 programmer.

The detector is compatible with the Analog Sensor Bases KSU-BASE-47 and KSU-BASE-67, Short Circuit Isolation (SCI) bases KSU-BASE-47-SCI and KSU-BASE-67-S CI as well as base sounder KSU-BSND7.

Specification

Ordering code & Description	KSU-OPT-7 Analogue Photoelectric Smoke Sensor 7th Edition
Operating voltage	24 ~ 41 VDC
Standby current	340µA
Alarm Current	Status LED off – 340µA Status LED on – 8.5mA
Remote Indicator output current	9.2mA max
Polling current	6.75mA
Smoke Density Range	1.40 - 3.30%ft@0-300FPM open area
	1.40 - 2.75%.ft@300PFM in duct
	1.40 - 4.00%.ft@1000PFM in duct
	1.40 - 4.00%.ft@2000PFM in duct
	1.40 - 2.37%.ft@3000PFM in duct
	1.40 - 4.00%.ft@4000PFM in duct
Operating Temperature Range	32°F (0°C) ~ 120°F (48°C)
UL Listed Ambient Temperature	32°F (0°C) ~ 120°F (48°C)
Storage Temperature Range	-22°F (-30°C) ~ 140°F (60°C) max at 80% RH, -22°F (-30°C) ~ 104°F (40°C) max at 95% RH

Specification continued overleaf.

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Specification (continued)	
Maximum Operating Humidity	80% RH at 140°F (60°C), 95% RH at 104°F (40°C)
Color	Ivory
Dimensions	Ø 3.94" x H 1.68" (Ø 100mm x H 43mm)
Weight	3.4 oz. (96g)
Compatible Bases	KSU-BASE-47, KSU-BASE-67, KSU-BASE-47-SCI, KSU-BASE-67-SCI, KSU-BSND7

KSU-OPT-7 panel configuration settings*

The following table details the configuration options available on the Taktis UL and Elite RS control panels:

Configuration Options	Taktis UL	Elite RS
Configurable location text	√	√
Map to zone	√	√
Input Action	Fire, Supervisory	Fire, Supervisory
Input Action Message	√	√
Input Delay	X	X
Output Delay Bypass	√	√
Latching/Non-Latching	X	X
Day/Night Sensitivity Settings	√	√
Pre-Alarm Indication	√	√
Polling LED	√	√

* KSU-OPT-7 will be identified on the Taktis UL, Elite RS control panels and the LE2 configuration software as its Hochiki equivalent part number ALO-V.

Kentec Electronics Ltd. reserves the right to alter the specification of its products from time to time without notice. Although every effort has been made to ensure the accuracy of the information contained in this document it is not warranted or represented by Kentec Electronics Ltd. to be a complete and up-to-date description.