K·Mesh
Wireless Fire Detection

KM-WL8-OV

Wireless Optical Smoke Sensor with Built in Voice Annunciator and VAD

Features

▸ Approved to EN54-3, 7, 23 & 25
▸ RED compliant
▸ Voice Sounder and VAD featuring SmartGuide
▸ Internal algorithm processing for optimal performance
▸ Tamper switch
▸ Up to 10 years battery life*
▸ Utilises standard low cost lithium battery technology
▸ Bi-directional wireless communications
▸ Self-optimising wireless amplitude and frequency
▸ Compatible with all K-Mesh Translator/Expander Modules

Description

The KM-WL8-OV is a Wireless Optical Smoke Sensor with built in voice sounder and Visual Alarm Device (VAD) elements and is compatible with K-Mesh Translators and Expanders.

Three configurable sensitivity levels are provided for the smoke element - Low, Normal, High, these can be configured through the K-Mesh Wireless Translator screen or via the K-Mesh configuration software.

An EN54-3 approved voice sounder element provides audible notification of an alarm condition providing clear information and direction to building occupants. Voice messages are fully programmable with the facility to store up to 3 messages within the device - only one voice message can be played at one time. Using the K-Mesh configuration software customised voice messages can be created to suit users requirements.

An EN54-23 approved VAD (Visual Alarm Device) element is included with white LEDs, approved to category rating C-3-7.5 & O-4.4-7.5.

SmartGuide Feature

The KM-WL8-OV provides the unique SmartGuide feature which enables the devices to be programmed to use the VAD and white noise to direct building occupants to an exit. The devices are located along the route to an exit and when the fire alarm is activated a voice message can be played which is followed by each device operating its VAD in sequence providing a pulsing line of light moving towards the exit. The pulsing line of VADs will also be accompanied by white noise to help guide.

Up to 15 KM-WL8-OVs can be configured through the K-Mesh translator/configuration software to provide this feature.

This combination of detector, voice and VAD is unique with wireless systems providing a comprehensive solution.

Well proven adaptive radio signal processing algorithms are used within the device along with self-optimising wireless amplitude and frequency technology provide the highest levels of life safety and system reliability.

The device is provided complete with its mounting base and includes a built in anti-tamper switch which will indicate a fault at the panel should the device be removed from the base. An LED indication is provided on the top of the detector which is visible through 360°, this will flash green in standby mode, flashes yellow in fault and flashes red in an alarm condition providing clear indication of the device status.

The device can be programmed to turn off the flashing green and flashing yellow LED status, to preserve battery life. In this instance the status LED will only be used to indicate a fire state.

An in-built magnet test feature enables easy activation of the device to verify functionality and response.**

Primary and secondary batteries are fully monitored with low battery voltages being displayed on the Kentec Fire Alarm Control Panel.

Standards & Approvals

EN 54-3 Sounders

EN 54-7 Smoke Detectors

EN 54-23 Visual Alarm Devices

EN54-25 Components using radio links

Ordering codes

Ordering code	Description
KM-WL8-OV	Wireless Optical Smoke Sensor with Built in Voice Annunciator and VAD

Specifications

Operating frequency range	866 - 869.85 MHz
Communication range (in open air)	1200 m
Modulation type	GFSK
Operating frequency channels	6
Max. radiated power	≤ 25 mW
Number of messages	3 (only one message can be played at any one time)
Sound pressure level @ 1m	Max 91 dB(A) for all messages
Frequency range	500 - 3500 Hz
VAD LED colour / Category rating	White / C-3-7.5 & O-4.4-7.5
Flash frequency	0.5 Hz
Operating temperature range	- 10 °C to + 55 °C
Max. tolerated humidity	95% RH (non condensing)
Dimensions (mm)	Ø 111 x H 74
Weight (g)	215

Power supply (Dual 3V lithium batteries)	1 x Primary cell (CR123A)	1 x Secondary cell (CR123A)
	1.2 Ahr	1.2 Ahr
	8 - 10 years primary battery life*	2 months secondary battery life

* Dependent on operational usage.

**Not available on all versions. Check individual device labelling to confirm this feature is supported.

Datasheet DS172 01/25 Rev.03

For further information visit www.kentec.co.uk

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