

# KM-WL8-EXP

## Wireless Expander Module

### Features

- ▶ Approved to EN54-18 and 25
- ▶ RED compliant
- ▶ Supports MESH communication structures
- ▶ Bi-directional wireless communication
- ▶ Self-optimising wireless amplitude and frequency
- ▶ Requires external power supply (24 V DC)

### Description

The K-Mesh Wireless Expander Module is used to increase the radio coverage of a single K-Mesh Translator Module on large sites or difficult buildings where radio coverage may be reduced.

K-Mesh Wireless Expander Modules act as an intermediary device boosting radio signal strength between field devices and the Translator as well as between Expanders themselves.

K-Mesh Wireless Expanders are critical in the provision of the unique wireless MESH technology offered by the K-Mesh system. Multiple Expanders can be connected to a single Translator Module creating multiple radio communication paths back to the Translator thus ensuring a robust and reliable wireless fire alarm system. Mesh technology also ensures that the wireless system continues to operate at its optimum communication levels by selecting the strongest radio signal path through the mesh at all times. An example of mesh configuration is shown on the back of this datasheet.

Expander Modules must be powered from a separate 24V DC supply with battery back-up and can be powered using any of Kentec's range of boxed power supply units.

### Accessories

#### KM-BBOX-01

Where additional space is required for installation of supply cables etc. The KM-BBOX-01 is available supplied with 20mm cable glands.



A maximum of 126 Expander Modules can be connected to a single translator module\*

K-Mesh Wireless Expander Modules will communicate with any of the wireless field devices provided as part of the K-Mesh range. Utilising a highly stable bi-directional radio communication protocol the Expander transmits information from the intelligent field devices to the Translator Module. Expander Modules are fitted with two internal antennae to reduce signal fading and enhance the radio communication.

System parameters associated with the Expander Module are configurable through the associated Translator Module.

Provided in a compact, aesthetically pleasing polycarbonate housing the Expander can be discreetly surface mounted.

### Ordering codes

Part no.	Description
KM-WL8-EXP	K-Mesh Wireless Expander
KM-BBOX-01	Back box for K-Mesh Translator, Expander and Output Modules (complete with 2 x 20mm glands)

### Standards & Approvals

EN54-18 Input/Output Devices

EN54-25 Components using radio links

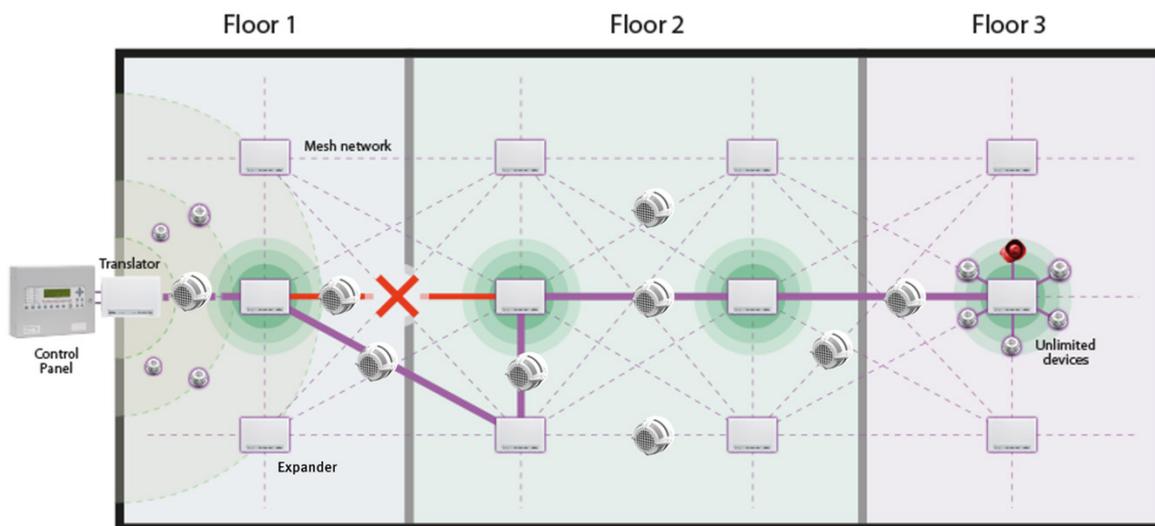


## Specifications

Operating frequency range	866 - 869.85 MHz	
Communication range (in open air)	Expander to Expander 2000 m	Expander to Device 1200 m
Modulation type	GFSK	
Operating frequency channels	6	
Max. radiated power	≤ 25 mW	
Time period between wireless signal transmissions	2 minutes	
Current consumption	80 mA	
Operating voltage	11 - 28 VDC	
Operating temperature range	- 10 °C to + 55 °C	
Max. tolerated humidity	93% RH (non condensing)	
Dimensions (mm)	H 145 x W 210 x D 40 without back box (Depth increases to 90mm with back box)	
Weight (g)	320	

\*Dependent on available loop address capacity

## Example of a mesh configuration



Datasheet DS166 11/21 Rev.01

For further information visit [www.kentec.co.uk](http://www.kentec.co.uk)

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