







## K-MESH - A NEW GENERATION OF WIRELESS FIRE DETECTION

K-Mesh is a wireless based family of products which can be used with Kentec’s addressable fire alarm panels.

At the core of the system is the wireless Translator module which is hard wired to the fire alarm control panel loop and communicates continuously with the wireless devices. Wireless Expander modules are designed to increase the reach and capacity of the wireless system while also providing exceptional levels of redundancy through the Mesh configuration.

K-Mesh is the next generation of wireless fire detection.

### COMMUNICATION RANGE

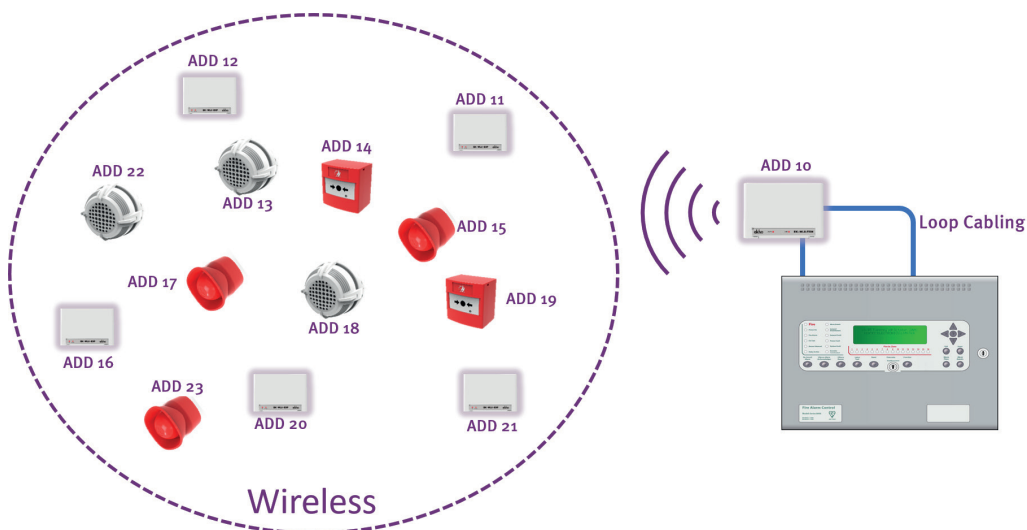
<b>K-Mesh</b>	1200m*
Typical Wireless Devices	150m

### NUMBER DEVICES PER EXPANDER

<b>K-Mesh</b>	Max 125
Typical Wireless Devices	32

### BATTERY LIFE

<b>K-Mesh</b>	up to 10 year battery life <sup>3</sup>
Typical Wireless Devices	5-years



\*In open air \*\*within the 126 device capacity of associated Translator \*\*3Dependent on operational usage

**KM-WL8-TRH**  
Wireless Translator Module



**KM-WL8-EXP**  
Wireless Expander Module



## TRAINING AND SUPPORT

To increase client confidence and reduce the need for return site visits, full training and support is available from the team of experts at Kentec throughout all stages of the project, ensuring optimal results and the successful delivery of the K-Mesh system.

**KM-WL8-O**  
Wireless Optical Sensor



**KM-WL8-OH**  
Wireless Multi Sensor



**KM-WL8-H**  
Wireless Heat Sensor



**KM-WL8-OS**  
Optical Sensor with Sounder



**KM-WL8-HS**  
Heat Sensor with Sounder



**KM-WL8-OV**  
Wireless Optical Sensor with Built-in Voice Alarm and VAD



**KM-WL8-OUT**  
Wireless Output Module



**KM-WL8-IN**  
Wireless Input Module



**KM-WL8-SND**  
Wireless Sounder



**KM-WL8-CP**  
Wireless Call Point



**KM-WL8-SK**  
Wireless Survey Test Kit



## KEY FEATURES & BENEFITS

### ADVANCED

Patented Mesh wireless technology ensures optimum system performance

### EXPANDABLE

Configurable to any size and complexity of building

### SIMPLE TO INSTALL

Fast deployment, with minimal disturbance

### FLEXIBLE AND VERSATILE

Suits all building types

### MEETING THE STANDARDS

Manufactured to the latest standards

### QUALITY & RELIABILITY

The system has been independently tested and approved by the LPCB and RED (EU Standard) reaching the highest level of quality and reliability.

### COST CONSIDERATIONS

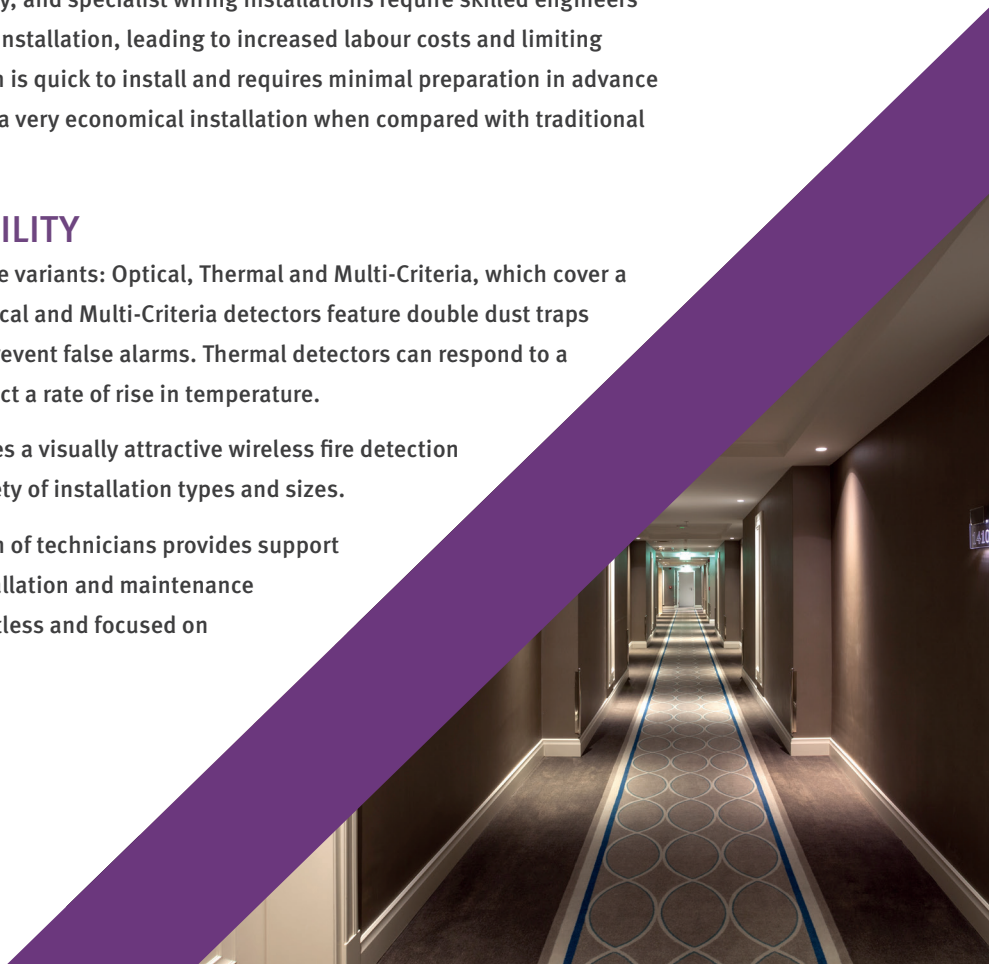
Project management can prove costly, and specialist wiring installations require skilled engineers and considerable disruption during installation, leading to increased labour costs and limiting access for extended periods. K-Mesh is quick to install and requires minimal preparation in advance of system installation. This leads to a very economical installation when compared with traditional hardwired devices.

### FLEXIBILITY & ADAPTABILITY

K-Mesh sensors are supplied in three variants: Optical, Thermal and Multi-Criteria, which cover a wide range of applications. The Optical and Multi-Criteria detectors feature double dust traps and adaptive signal processing to prevent false alarms. Thermal detectors can respond to a fixed temperature threshold, or detect a rate of rise in temperature.

The range of K-Mesh devices provides a visually attractive wireless fire detection solution, encompassing a wide variety of installation types and sizes.

In addition, Kentec's dedicated team of technicians provides support to customers, and ensures that installation and maintenance processes remain transparent, effortless and focused on customers' requirements.





# SELF-HEALING MESH NETWORK

The K-Mesh Expander modules create a self-healing Mesh network, which constantly relays field device signals back to the Translator module.

- ▶ Each wireless device determines which Expander has the strongest signal path and automatically connects to it
- ▶ The Expander Mesh network guarantees an “always on” connection between the wireless devices and the Translator/fire control panel

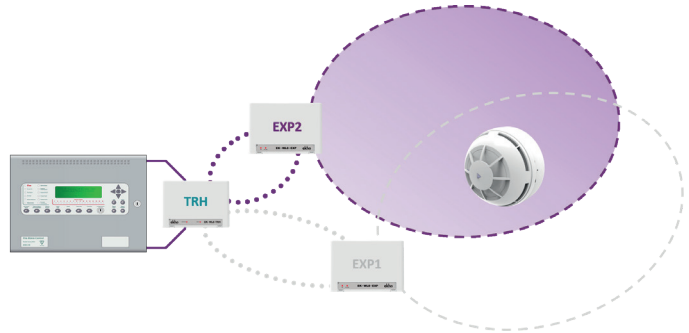
## Self-healing Mesh technology provides

- ▶ High level of reliability
- ▶ Automatically adapting to changing operating conditions: all devices automatically choose a parent expander depending on the quality of connection
- ▶ A simple design and commissioning process

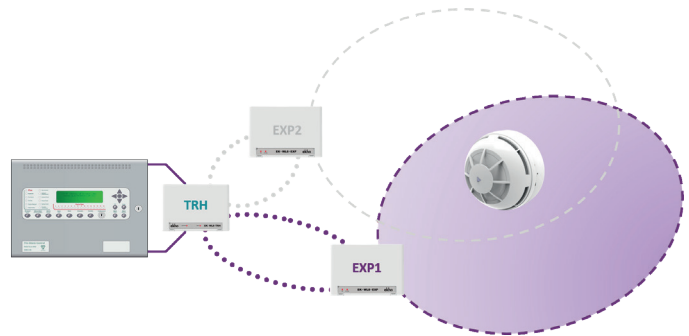
## Advantages for installers

- ▶ Simplified design and planning process
- ▶ Faster commissioning process
- ▶ Less time on site

The K-Mesh system can be designed, programmed and commissioned from the free “K-Mesh Configurator” software before visiting the site, saving on installation time.



In this example, the K-Mesh sensor is connected to the Translator via Expander 2, as it is the strongest signal pathway.



If the signal to Expander 2 is compromised, the sensor automatically finds and connects to an Expander with the next strongest signal pathway, in this example, Expander 1.

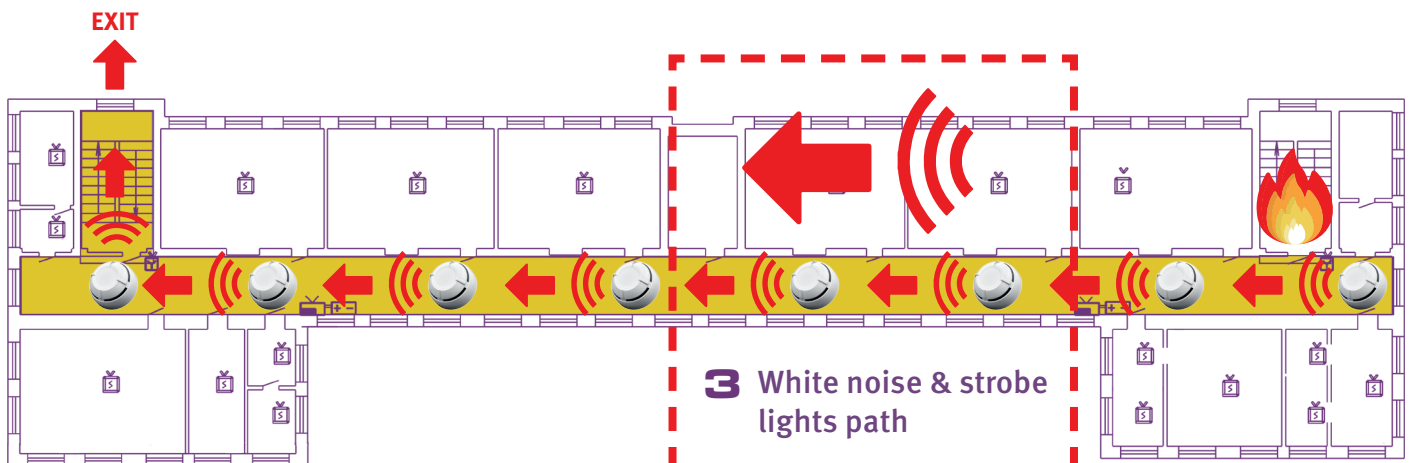


# WIRELESS DIRECTIONAL EVACUATION

The SmartGuide is a dynamic, intelligent exit route guiding system, to aid people to safely exit a building in an emergency, using voice and light via:

- ▶ A programmable local/multi language voice announcement to calmly describe the nature of the emergency
- ▶ A Doppler effect, white noise sound path guidance for the vision impaired
- ▶ A progressive propagation light path for the hard of hearing

SmartGuide is perfectly in-tune for all types of buildings—it is simply a ‘smart guide’ to aid people to exit the building as safe as possible.



## 1 Smoke detection in a protected area

Integrated fire detectors & annunciators analyse the smoke level in the air and transmit this information to the control device

## 2 Voice alarm in case of fire

In case of fire, alarm annunciators/detectors activate voice message: **Attention! There is a fire in the building! Follow the sound and light indication!**

## 3 White noise & strobe lights path

System devices alternatively make noise signals and strobe flashes creating a sound wave and a light path to the safest evacuation route

## 4 Control of evacuation process

The system allows changing the direction of a sound wave and strobe lights path to the other emergency exit if necessary






## COMPANY OVERVIEW

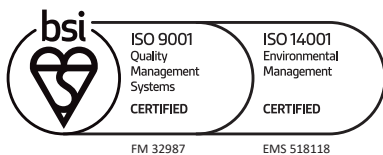
Kentec Electronics is one of the world's leading life safety solutions manufacturer of conventional, analogue addressable fire detection and extinguishant control panels.

Founded in 1985, Kentec is an end-to-end manufacturer, with everything being sold being made in the UK. It employs approximately 250 members of staff in its production facility, head office and research and development department.

In addition to design and manufacture, Kentec provides technical support specified to the local standards and customer requirements of over 90 countries worldwide. With a commitment to meeting the needs of individual national markets, Kentec has achieved a global reputation, resulting in its life safety systems being installed in numerous prestigious sites across the world.

Kentec manufactures products approved to EN54, EN12094, UL,FM,NFPA, and marine classification societies.





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