

# EK-WL8-EXP

## Hybrid Wireless Expander Module

### Features

- ▶ Approved to EN54-18 and 25
- ▶ RED compliant
- ▶ Supports MESH communications
- ▶ Bi-directional wireless communication
- ▶ Self optimising wireless amplitude and frequency
- ▶ Makes additions to existing wired systems easy and cost effective
- ▶ Requires external power supply (24 VDC).



### Description

The EK-WL8-EXP Expander Module increases radio coverage of an Ekho Translator Module, allowing the use of the system in larger buildings and in difficult wireless environments. Multiple Expanders can be utilised in a micro cell structure to provide a solution to large, complex systems.

When multiple Expander Modules (two or more) are used, these provide a MESH solution maintaining the wireless systems integrity. The system allows up to 126 Expander Modules or field devices to be configured to any one Translator Module\*.

Any combination of Ekho wireless devices can be connected to the Expander Module\*. The Expander Module transmits the intelligent device information from the field devices to the Loop Translator Module using a highly stable bi-directional radio communication protocol. The system parameters are programmed into the Expander Module via the Translator Module.

The Expander Module Is fitted with two Internal antennas reducing signal fading and ensuring reliable radio communications. Optional back box available.

### Specifications

|                                                   |                                             |                                             |
|---------------------------------------------------|---------------------------------------------|---------------------------------------------|
| Ordering code                                     | EK-WL8-EXP                                  | Optional Back box is available (EK-BBOX-01) |
| 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                                     |                                             |
| 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                          |                                             |
| IP Rating                                         | IP41                                        |                                             |
| Max. tolerated humidity                           | 93% RH (non-condensing)                     |                                             |
| Weight (g) / Dimensions (mm)                      | 320 / H 143 x W 210 x D 42 without Back box |                                             |

### Standards & Approvals

EN54-18 Input/Output Devices

EN54-25 Components using radio links



\*Dependant on available loop address capacity

