







### Sygno-fi Expander Module (SYG-EM)

The SYG-EM Sygno-fi Expander Module is compatible with all Sygno-fi wireless intelligent translators and the conventional expander. The unit provides a convenient method to increase radio communication range beyond that possible from a single translator by relaying the radio communication to further expanders or directly to the wireless field devices. This allow you to build large fully wireless systems or add wireless devices onto areas where cabling for translators is difficult or impossible.

The expanders are programmable for a redundant path to the translator, so that if any expander in the chain fails, the transmission path can find an alternate route. The redundant paths are identified and tested during system commissioning for maximum reliability.

All the wireless communication relies on a channel pair for spurious RF noise rejections and maximum link reliability. All expanders are fully monitored ensuring that the highest levels of life safety are maintained.

## **TECHNICAL DATA**

Operating frequency range	868 – 870 MHz
Power supply range	9Vdc – 30Vdc
Typical current consumption	24mA (@12Vdc)
Max radiated power	14dBm (25mW)
Operating Temperature	-10°C to +55°C
Max humidity (non condensing)	90% RH
IP Rating	65
Weight	700g
Dimensions	235mm x 160mm x 70mm

## **KEY FEATURES**

- Compatible with all intelligent and conventional translators
- Bi-directional wireless communication
- 8 pairs of network channels
- Dual channel and dual path redundancy
- Long communication range (≅ 1 km in open air)
- Internal antennae design protects from environmental conditions, vandalism, accidental damage or misuse
- Requires external power supply unit
- Low current consumption
- Rich fire data transfer to translator (eg optical and thermal value, link quality, battery status, chamber drift compensation status)
- Up to 32 wireless field devices per expander
- Easy scan & link programming option
- External PSU status supervision
- 3rd party Approval to EN54-18 and EN54-25
- 5 year product warranty



# **TECHNICAL INFORMATION**



## **APPROVALS**

- BS EN54-18: Input/Output Devices
- BS EN54-25: Components using radio links and system requirements

