

PRODUCT DATASHEET

L-MC-SG

WIRELESS (LIBRA) MULTI-CRITERIA DETECTOR

The L-MC-SG is the latest in wireless multi-criteria detector technology. It is a fully intelligent device and compatible with all Argus wireless Translator and Expander modules. The detector is designed for open area protection and combines both dual-path smoke and heat detection technologies for improved performance, whilst maintaining the high levels of unwanted alarm rejection. Utilising well-proven adaptive radio signal processing algorithms ensure the highest levels of life safety and system reliability are achieved. An in-built magnet test allows easy activation to verify correct functionality and response.

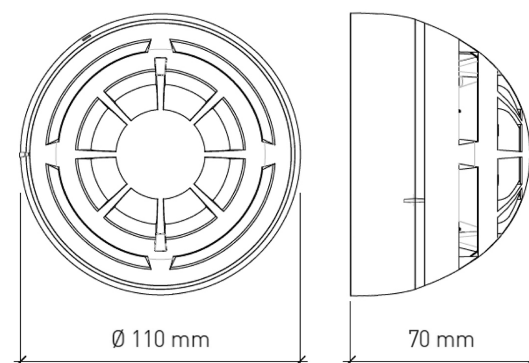
*For BASE COMPATIBILITY see page 3



KEY FEATURES

- Advanced dual-path optical chamber design
- Internal algorithm processing optimises performance
- 3rd party approved
- Up to 10 year battery life
- Utilises standard low cost lithium battery technology
- Multiple smoke and heat sensitivity settings
- Bi-directional wireless communications
- Compatible with all Argus translators and Expanders
- Complies with the latest multi-sensor standard EN 54-29
- 5 year product warranty
- Device identification tab
- Twin alarm LEDs for 360° visibility

TECHNICAL INFORMATION



TECHNICAL SPECIFICATION

| | |
|---|-------------------|
| ■ Operating frequency range | 868 – 870 MHz |
| ■ Max. radiated power | 14dBm (25mW) |
| ■ Operating channels | Multiple |
| ■ Choice of sensitivity settings | 3 smoke/2 heat |
| ■ Dimensions | 110mm x 70mm |
| ■ Batteries | 2 x CR123A |
| ■ Weight | 190g |
| ■ Temperature Range (no icing) | -10°C to +55°C ** |
| ■ Max tolerated humidity (non condensing) | 95% RH |
| ■ IP Rating | 40 |
| ■ Magnet test | Yes |

**Performance may vary at extremes of range

STANDARDS & APPROVALS

- BS EN 54-5 Class P: Heat Detectors
- BS EN 54-7 Smoke Detectors
- BS EN54-25: Components using radio links
- BS EN54-29: Multi-sensor fire detectors
- CEA4021



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LED INDICATION

The device is equipped with 2 tri-colour LEDs (red/green/amber) that provide visual indication for functional conditions and battery levels as indicated in the sections below:

OPERATIONAL STATUS INDICATIONS

| Status | Amber LED | Green LED | Red LED |
|--|-------------------------------|---------------------------------|--------------------------------|
| Power Up | - | 1 Second On then | 4 x 0.5 Seconds On |
| Linking to System | - | Blinking until link is complete | - |
| Link Procedure has Failed | - | - | Continuous |
| Normal condition | - | - | - |
| Alarm condition | - | - | 0.5 Second On & 0.5 Second Off |
| Main battery fault | 0.1 Second On & 5 Seconds Off | - | - |
| Secondary battery fault | - | 0.1 Second On & 5 Seconds Off | - |
| Both batteries fault | 0.1 Second On & 5 Seconds Off | 0.1 Second On & 5 Seconds Off | - |
| Other Fault | Sequential bi-colour flashing | | - |
| Tamper | - | - | - |
| Loss of radio link with Translator/ Expander | - | - | - |

COMMUNICATION QUALITY ASSESSMENT

It is possible to assess the wireless communication quality between the device and translator or expander using the built in test facility. After successful programming of the device, changing the “Program” switch to the “ON” position will set the device into test mode and the LED will start blinking according to the table below:

| Communication Quality (dB) | Level | Green LED | Red LED |
|--|------------------------------|-------------|-------------|
| No connection | Fail | - | Two flashes |
| Link margin is less than 10 dB | Poor - not acceptable | - | One flash |
| Communication with link margin from 10 dB to 20 dB | Medium/Low - not recommended | One flash | - |
| Communication with link margin from 20 dB to 30 dB | Good | Two flashes | - |
| Robust communication with link margin over 30 dB | Excellent | Two flashes | - |

Note: The “program” switch must be returned to the 1 position for normal device operation

BASE COMPATIBILITY

This device is supplied with a standard base and is compatible with the following Argus base sounders:

- SGRBS100/L Wireless Sounder Base
- SGRBS100-AV/L Wireless Sounder Base Visual Indicator

