

# features

- **Extremely high sensitivity LASER based smoke sensor**
- **Superior early warning performance**
- **Effective response to both fast flaming and slow smouldering fires**
- **Stable communication with high noise immunity**
- **9 sensitivity levels (0.07 - 6.56%/m)**
- **Twin LEDs for 360° visibility**
- **Built-in test**
- **Third party tested to EN54-7:2000**

The MI-LZR high sensitivity LASER based intelligent smoke sensor provides an extremely high sensitivity to fire conditions, by detecting the earliest particles of combustion. This is achieved by combining a patented optical chamber, the latest in LASER diode and precision optical technology. This combination enhances the sensitivity of the device. Sophisticated processing circuitry and smoothing filters help eliminate the effects of transient environmental noise, which can be the cause of unwanted alarms.

The result is a very sensitive and stable sensor able to achieve sensitivities of 0.07 % to 6.56% per metre obscuration - up to 100 times more sensitive than a standard photoelectric smoke sensor. Historically, photoelectric smoke sensors have shown a quick response to slow smouldering fires, whilst ionisation smoke sensors have responded quicker to fast flaming fires. The MI-LZR provides a good response to both types of fire by improving the signal to noise ratio. The use of a LASER enables detection of small particles (usually associated with fast flaming fires), that are not as easily detected by a standard photoelectric smoke sensor.

A quick response and pin point accuracy makes the MI-LZR especially suitable for environmental applications where there is substantial cost for down time or a significant investment in installed equipment has been made. Typical installations are Electronics manufacturers clean rooms, telecommunication rooms and computer rooms.



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# MI-LZR High Sensitivity Analogue Addressable Smoke Sensor Data Sheet

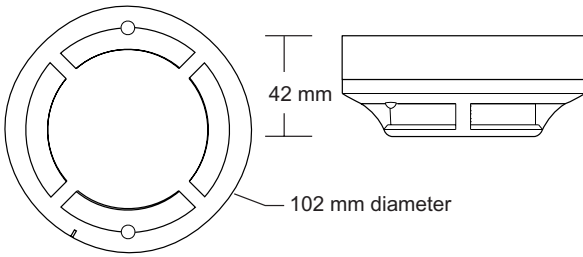


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# mechanical

# approvals

Dimensions:



Weight: 142g  
 Colour: Pantone warm grey 1C  
 Material: Bayblend FR110  
 Terminal wire guage: 2.5mm<sup>2</sup> max.  
 Operating temperature: -10°C to +55°C  
 Relative humidity: 10% to 93% (non-condensing)



REF: 198h/01

# part numbers

**MI-LZR** High sensitivity LASER smoke sensor.

# accessories

**MOD400R** Detector sensitivity test tool. Use with most analogue or digital multimeters.

**SMK400** Surface mounting kit provides for entry of surface wiring conduit. For use with B501 base only.

**RMK400** Recess mounting kit. For use with B501 only.

**B501** Detector mounting base.

**B501IEFT** Detector mounting base fitted with loop isolator.

### Notes

The MI-LZR is compatible with B500 series bases and other Morley-IAS sensors and modules.

\* Sensitivity levels covered by EN54-7:2000

# electrical

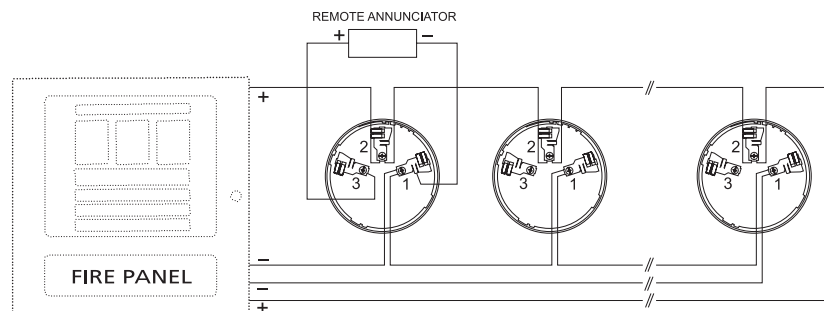
Voltage: +15 to +32Vdc

Standby current:

No communication: 230µA @ 24Vdc maximum  
 One communication every 5 seconds, LED blink: 330µA @ 24Vdc maximum  
 Alarm current: 6.5mA @ 24Vdc maximum

Sensitivity modes:

1	0.07 %/m
2	0.10 %/m
3	0.16 %/m
4	0.33 %/m
5	0.66 %/m
6	1.65 %/m
7	3.24 %/m*
8	4.85 %/m*
9	6.41 %/m*



# local distributor

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