

## SPECIAL DETECTORS & ACCESORIES

### BEAM DETECTION

#### HIGH SENSITIVITY SPOT DETECTOR



The MI-LZR-S3I high sensitivity, high gain amplifier based intelligent smoke sensor is a unique offering from Morley-IAS that provides extremely high sensitivity to fire conditions, by detecting the earliest particles of combustion. This is achieved by combining a patented optical chamber with advanced high power output IR LED diode and precision optics technology, which is matched with a unique superior high gain IR receiver amplifier, enhancing the sensitivity of the device.

The chamber is supported by sophisticated processing circuitry and microprocessors that feature smoothing-filter algorithms to help eliminate transient environmental noise conditions, and reduce nuisance alarms.

#### PART. NO

MI-LZR-S3I

#### FEATURES

- Extremely high sensitivity, high power output IR LED and high gain IR receiver amplifier based smoke sensor
- Superior early warning performance
- Effective response to both fast flaming liquid fires and slow smoldering fires
- New mechanical platform with patented chamber to maximize smoke entrance and false alarm immunity
- Improved resilience to false alarms through dust
- Removed risk of false alarms through insects
- Includes single pole short circuit isolation with status control
- Advanced Protocol
- Twin LED indicators providing 360° visibility, offering tri-color flashing option (red, green and amber colors)
- Rotary decade address switches
- Pure white color to compliment modern buildings

#### TECHNICAL SPECIFICATION

|                              |                                                                                          |                                      |                                            |
|------------------------------|------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------|
| OPERATING VOLTAGE RANGE      | 15 to 32VDC                                                                              | ADDITIONAL LOOP RESISTANCE           | Typical 0.08 Ohm @24V (max 0.17 Ohm @ 15V) |
| MAXIMUM STANDBY CURRENT      | 250µA at 24VDC (no communications)<br>300µA at 24VDC ( LED blink enabled, once every 5s) | REMOTE OUTPUT VOLTAGE                | 22.5VDC                                    |
| LED CURRENT                  | Red: 3.5mA Green: 7.0mA Yellow: 10.5mA at 24VDC                                          | REMOTE OUTPUT CURRENT                | 10.8mA @ 24Vdc                             |
| ISOLATION CURRENT            | 15mA at 24Vdc                                                                            | ADDITIONAL LOOP RESISTANCE WITH BASE | typ 0.02 Ohm (max 0.03 Ohm)                |
| MAXIMUM CONTINUOUS CURRENT   | 1A (Switch Closed) Voltage at 24VDC                                                      | OPERATING TEMPERATURE                | -10°C to +55°C                             |
| MAX. WIRE GAUGE              | 2.5 sqmm                                                                                 | COLOR                                | White (Trim), black (back-box)             |
| HUMIDITY                     | 10 to 93% relative humidity (non-condensing)                                             | HEIGHT                               | 59 mm installed in base                    |
| AIR SPEED                    | 0-20 m/s                                                                                 | DIAMETER                             | 104mm                                      |
| WEIGHT                       | 110g                                                                                     | COLOUR                               | Pure White (RAL9010)                       |
| MAX WIRE GAUGE FOR TERMINALS | 2.5mm <sup>2</sup>                                                                       | MATERIAL                             | PC/ABS FR                                  |