The SIO800 Addressable Single Input/Output Module is an MX addressable module that provides one clean contact input and a voltage-free changeover relay output. The input supports normally-open or normally-closed contacts and short/open circuit faults — depending on the input mode selected by the Control and Indicating Equipment (CIE). The relay is controlled by a command sent from the CIE via the MX addressable loop. The LED illuminates when the input goes into alarm, and can also be programmed to blink when polled by the CIE.

The MX1 CIE supports the following modes for the input circuit:
• Normally-open contact, closing for alarm, with open circuit fault.
• Normally-open contact, closing for alarm, with short and open circuit fault.
• Normally-closed contact, opening for alarm, with short circuit fault.
• Normally-closed contact, opening for alarm, with short and open circuit fault.

Interrupt operation can be enabled for any mode to speed up indication of an alarm at the CIE. The relay output is unsupervised, but a check-back fault will be generated if the relay state does not match the commanded state for the relay.

### Features
- Compatible with MX Addressable Loop on the VIGILANT MX1 fire panel
- Single input for clean contact devices
- Normally open/closed operation
- Optional Interrupt for fast operation
- Change-over relay output
- Loop powered

### Specifications
- **Loop Voltage**: 20V to 40Vdc
- **Quiescent Current**: 300µA
- **Alarm State Current**: 3mA
- **Circuit Resistance**: 50 Ohm
- **EOL Resistor**: 3.3k Ohm
- **Alarm Resistor**: 680 Ohm
- **Relay Contact Rating**: 2A @ 24Vdc
- **Ambient Temperature**: 25°C to +70°C
- **Storage Temperature**: −25°C to +80°C
- **Relative Humidity**: 10% to 95% (non cond.)

### Indoor Applications Only
- **ActivFire Listing**: afp-3178
- **VF/671**: 250
- **Ambient Temperature**: −25°C to +70°C
- **Relative Humidity**: 10% to 95%

### Dimensions (HWD)
- **61 x 84 x 15 mm**
- **Wire Size (maximum)**: 2.5sq. mm

### Part Numbers
- **SIO800 PCB**: 3
- **M520 Ancillary Cover**: 3
- **K2142 Back Box**: 3
- **D800 Ancillary Housing**: 3

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1. Addressable loop voltage provided by MX CIE.
2. MX1: Refer to appropriate CIE manual for design specifications. MX2: LT0441(Au), or LT0361 (NZ).
3. PCB c/w EOL resistor, mounting screws, cover labels.
**Installation**
The SIO800 is supplied as an open circuit board (PCB) with mounting hardware and End of Line (EOL) resistor. It must be fitted in a suitable enclosure. It may be mounted on a gear plate using plastic standoffs, to an M520 Ancillary Cover and K2142 back box, or into the D800 Ancillary Housing.

The K2142 mounting box provides a convenient surface mounting enclosure and the M520 Cover is designed to accommodate the SIO800. The contacts supervised must be voltage free. Do not connect two SIO800 inputs together or join with other MX module inputs.

**Address Setting**
The SIO800 is supplied with a default (invalid) address of 255 and must be set to the correct loop address using the 850EMT or 801AP MX Service Tool.

**Wiring**
SIO800 simplified wiring diagrams.