



Analogue Addressable Isolator – 8 Spur

*Provides eight isolated analogue addressable spurs
Allows existing cabling to be re-used when converting from
conventional to analogue addressable detection system*

Overview:

The **Pertronic Analogue Addressable Isolator Board – 8 Spur (8SAAIB)** provides up to eight isolated spurs from an analogue addressable loop circuit.

This product allows conventional detector zones to be converted to analogue addressable (AA) systems by replacing the conventional detectors and bases with AA detectors and modules connected to the existing cabling.

The board has individual spur isolators. A short-circuit on any spur will not affect the operation of any other spur, or the loop to which they are connected.

In addition, this board has input and output isolators. These ensure that if the 8SAAIB is installed remote from the control panel, a short-circuit on one side of the loop will not affect the operation of connected spurs or the other side of the loop circuit.



**Analogue Addressable Isolator Board – 8 Spur
(8SAAIB)**

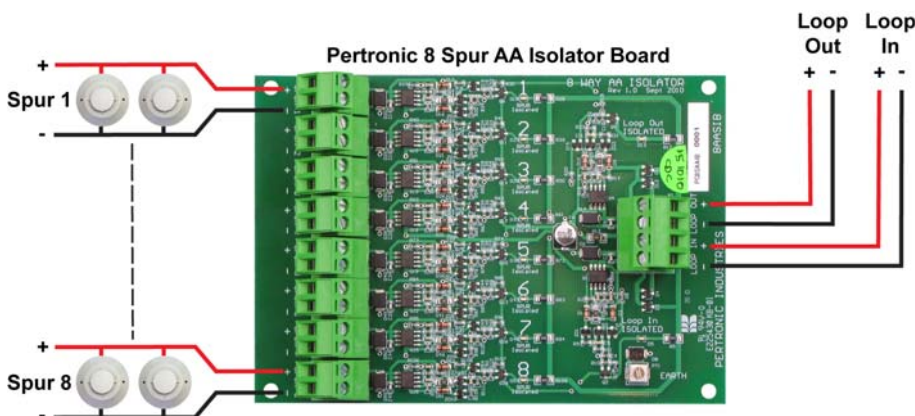
Features:

- » Provides up to eight analogue addressable spurs from one analogue addressable loop circuit
- » A short-circuit on any spur will not affect normal operation on other spurs or the rest of the loop circuit
- » A short-circuit on either side of the 8SAAIB **LOOP IN** and **LOOP OUT** connections will not affect normal operation of the spurs or the other side of the loop circuit.
- » A short-circuit fault on any spur, or on either side of the 8SAAIB, is identified by a yellow LED
- » Spurs and unused spur connections do not need to be terminated

Specifications:

| | | |
|---|--|--------------|
| » PCB Dimensions | 137.5 x 96.5 x 25 | W x H x D mm |
| » Mounting Holes | 4 x 4 mm @ 127.5 x 89 mm | |
| » Weight | 100 g | |
| » Operating Temperature | 0 °C to 40 °C | |
| » Humidity | 0 % to 90 % RH, non-condensing | |
| » Voltage Range | Loop voltage | |
| » Quiescent Current | 1.5 mA ± 10 % | @ 24 VDC |
| » Isolate Current Per Spur | 16.5 mA ± 10 % | |
| » Isolation Threshold | Loop Voltage ≤ 4.8 V | |
| » Restoration Threshold | 7.5 V | |
| » Switch ON Resistance (Loop In to Loop Out) | 0.42 Ω | |
| » Switch OFF Resistance (Loop In to Loop Out) | >4 kΩ | |
| » LED Indications | 10 x yellow (1 per spur, plus LOOP IN, LOOP OUT) | |
| » Maximum Zones | Each spur may cover no more than one zone | |

Connection Diagram:



Maximum Cable Length (Loop + Spur)

| Conductor Size | Max. Length |
|---------------------|-------------|
| 2.5 mm ² | 2500 metres |
| 1.5 mm ² | 1500 metres |
| 1.0 mm ² | 1000 metres |

Ordering Information:

| Product Code | Description |
|--------------|----------------------------|
| 8SAAIB | AA Isolator Board – 8 Spur |

Application Guidelines:

If analogue addressable spurs are wired with non-twisted cable (such as existing flat two-core cable):

- » The resistance between each conductor and the system earth (ground) should be > 50 kΩ.
- » The total AA cable resistance must not be more than 50 ohms (25 Ω per conductor). See table at left for maximum length.
- » The number of detectors in each zone, and the number of zones covered by a single AA loop, must meet all regulatory and project requirements.

NOTE: Non-twisted cable should not be used in AA detection circuits if the detection cable will run alongside, and close to, other cables that may produce, or be susceptible to, interference.

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