

Intelligent Switch Monitor



Technical data

All data is supplied subject to change without notice. Specifications are typical at 24V, +25°C and 50% RH unless otherwise stated.

| | |
|------------------------------------|---|
| Supply voltage (Vmin–Vmax) | 17–35V dc |
| Protocol | 5–13V peak to peak |
| Power-up surge current | 900µA |
| Quiescent current | 500µA |
| Max current LEDs On | 2mA |
| Max current LEDs disabled | 500µA |
| Isolator data | Refer to the Short-Circuit Isolation datasheet PP2090 |
| Operating temperature | – 40°C to + 70°C |
| Humidity | 0% to 95% RH (no condensation or icing) |
| Vibration, impact and shock | EN 54-17 & EN 54-18 |
| Standards & approvals | EN 54-17, EN 54-18, CPR and LPCB |
| Dimensions | 60mm height x 150mm width x 90mm depth |
| Weight | 239g |

Product overview

| | |
|--------------------------------|---|
| Product Type | Switch Monitor |
| Part No. | SA4700-100APO |
| Digital Communication Protocol | XP95®/Discovery® & CoreProtocol® compatible |

Product information

The Intelligent Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

Refer to Table 1 for digital communications protocol compatibility and Table 2 for the Intelligent Switch Monitor operating modes.

- Improved design for ease of wiring meaning faster installation
- Contains controllable isolator *
- Address range 1 - 254 *
- Five pre-configured modes, including compatibility mode from XP95/Discovery to CoreProtocol systems *
- Priority mode for fast response *
- Configurable input styles *
- Earth fault monitoring *

* Note: CoreProtocol enabled systems feature only, please check with your system partner for availability.

Table 1 Digital communications protocol compatibility

| Protocol | Device Behaviour |
|---|------------------|
| XP95 [†] /Discovery [†] | XP95 |
| CoreProtocol [†] | Soteria |

[†] Fire control panel dependant

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Table 2 Intelligent Switch Monitor operating modes*

| Mode | Description |
|------|--|
| 1 | DIL Switch XP Mode |
| 2 | Switch monitor - normal resistance bands with alarm delays |
| 3 | Priority switch monitor - normal resistance bands |
| 4 | Switch monitor - N/C input with alarm delays |
| 5 | Priority switch monitor - N/C input |

* CoreProtocol enabled systems only

Mechanical Construction

The Intelligent Switch Monitor (see Figure 1) is available in the new faceplate style enclosure. This can be mounted with the supplied back-box for surface mounting or flush mounted using a UK double gang, flush mounting back-box of minimum depth 30mm.

EMC Directive 2014/30/EU

The Intelligent Switch Monitor complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this datasheet.

A copy of the Declaration of Conformity is available from Apollo on request.

Construction Products Regulation 305/2011

The Intelligent Switch Monitor complies with the essential requirements of the Construction Products Regulation 305/2011.

A copy of the Declaration of Performance is available from Apollo on request.

Connectivity

Refer to Figures 2, 3 & 4 for unit connection information. Refer to the Installation Guide 39215-163 for the installation instructions on this product. Table 3 details the status indications of this unit, from normal operation through to fault conditions.

Figure 1 Intelligent Switch Monitor dimensional drawing

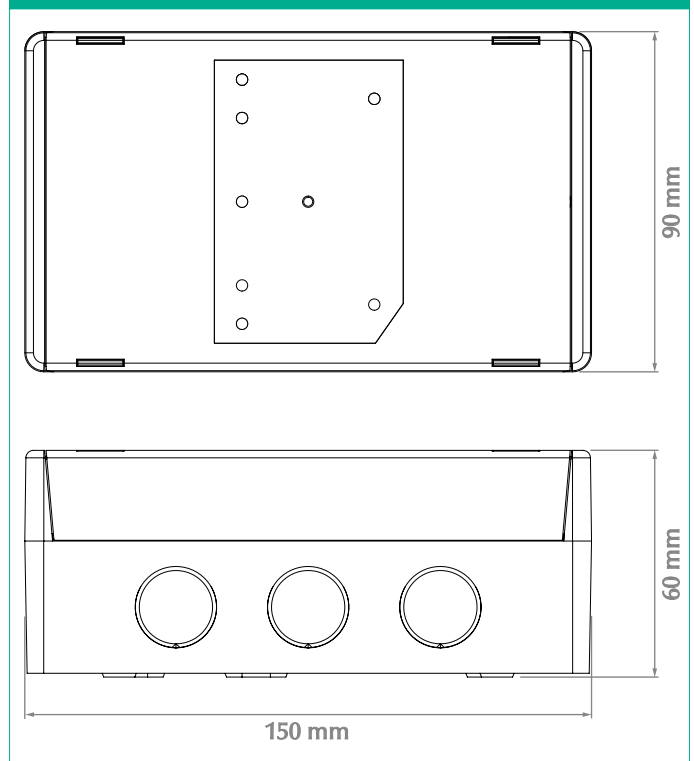


Table 3 Status Indications

| Legend | LED Status | Description |
|-----------|-------------------|--------------|
| Poll/ISOL | Flashing Green | Polling LED |
| Poll/ISOL | Continuous Yellow | Isolator LED |
| I/P | Continuous Yellow | Input Fault |
| I/P | Continuous Red | Input Active |

Figure 2 Intelligent Switch Monitor standard resistive monitoring mode connectivity diagram

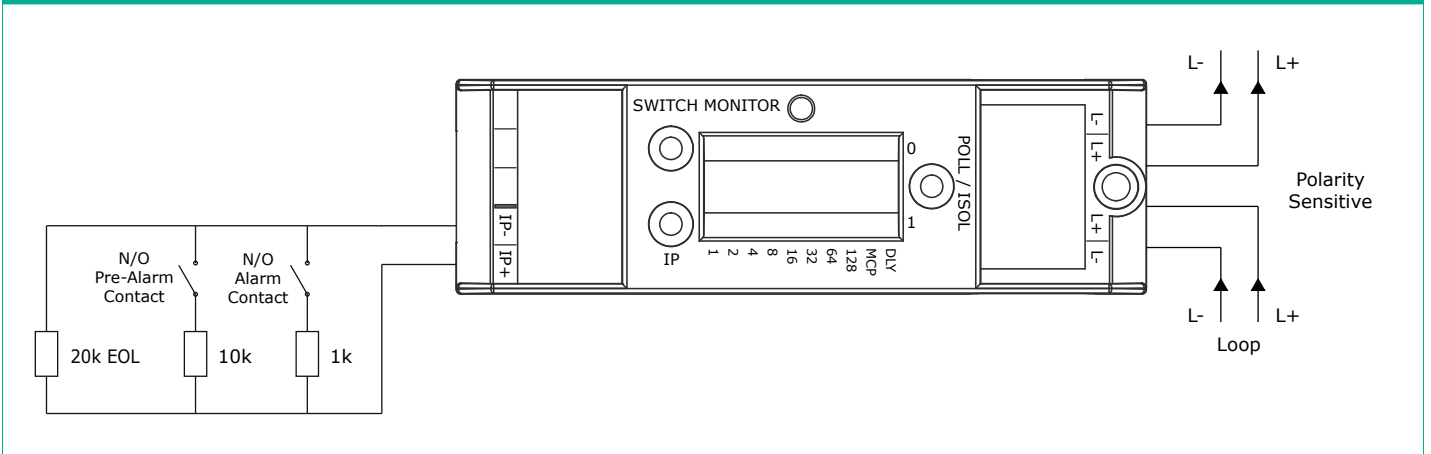


Figure 3 Intelligent Switch Monitor normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

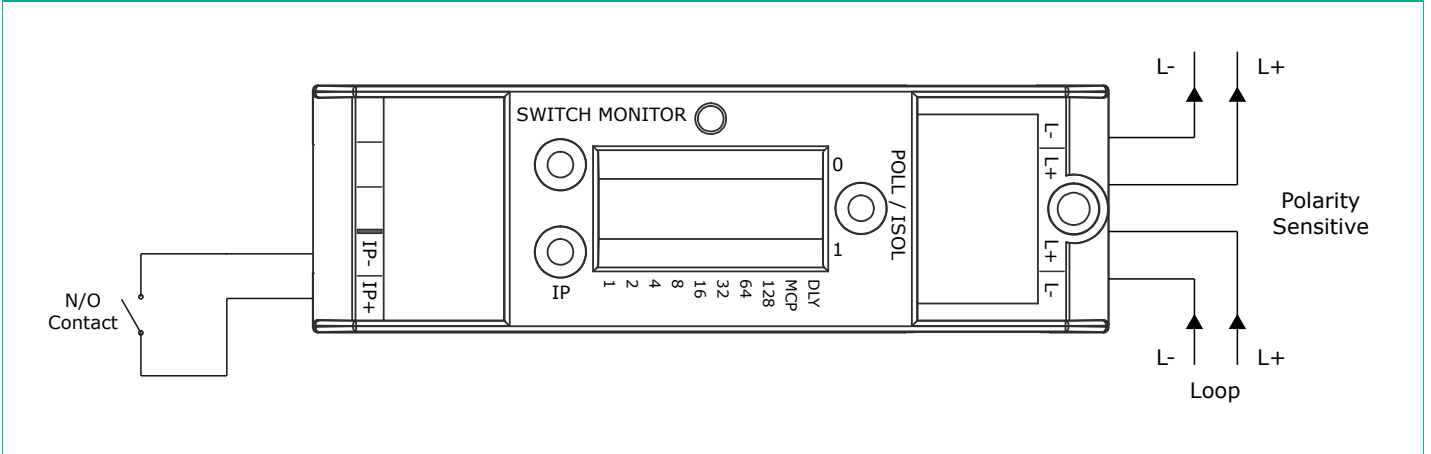


Figure 4 Intelligent Switch Monitor normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)

