

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

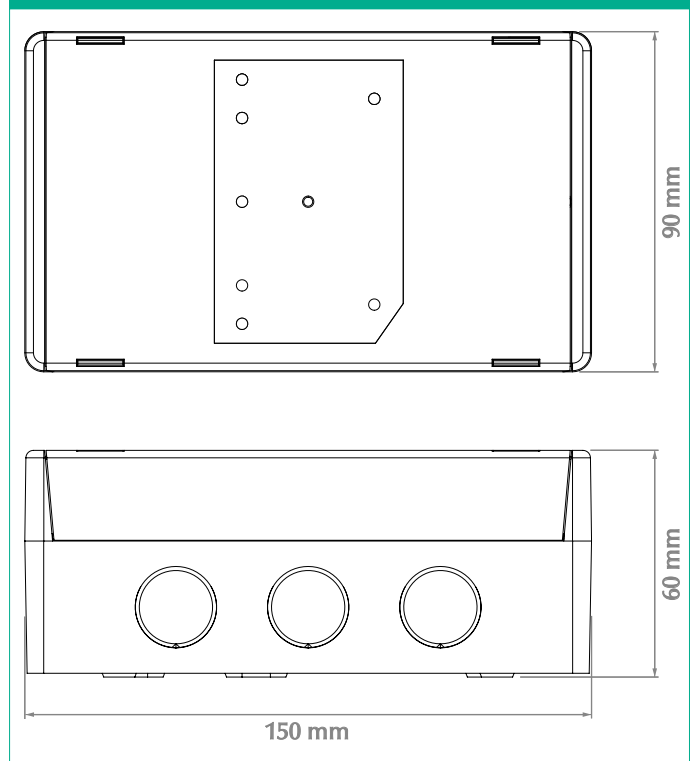


Table 3 Status Indications

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

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Figure 2 Intelligent Switch Monitor standard resistive monitoring mode connectivity diagram

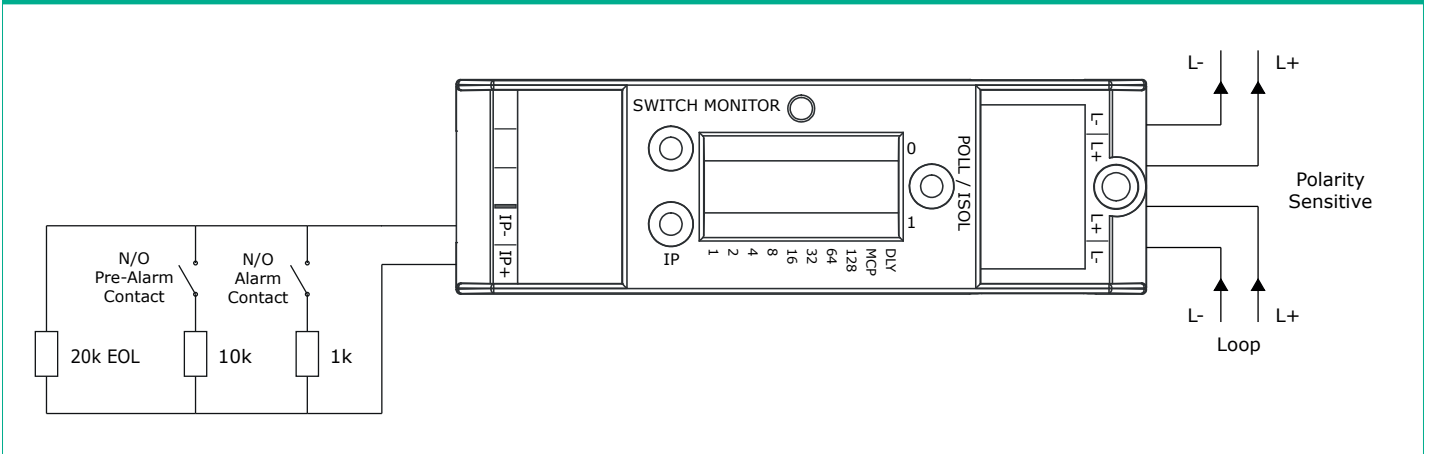


Figure 3 Intelligent Switch Monitor normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

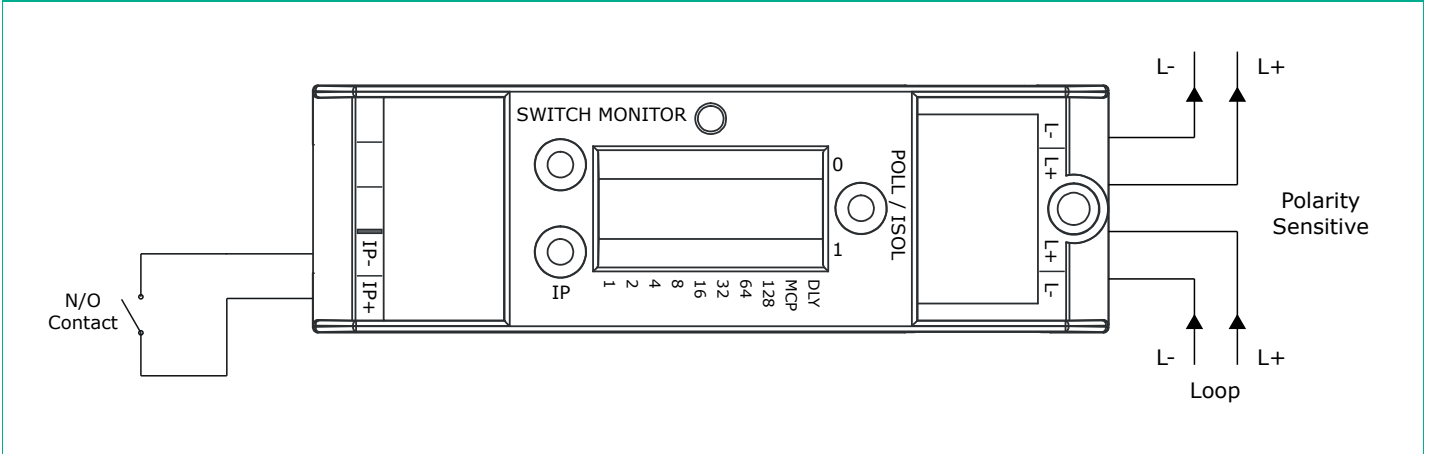


Figure 4 Intelligent Switch Monitor normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)

