Intelligent Switch Monitor



Product overview

Product	**Switch Monitor**
Part No.	**SA4700-100APO**
Native Protocol	**XP95 and CoreProtocol**
Compatible Protocols	**Discovery (as XP95)**

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 *

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

Manufacturer's Specification

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 V – 35 V dc*
Protocol	*5 V – 13 V peak to peak*
Power-up surge current	*900 µA*
Quiescent current	*500 µA*
Max current LEDs On	*2 mA*
Max current LEDs disabled	*500 µA*
Isolator data	*Refer to the Short-Circuit Isolation datasheet PP2090*
Operating temperature	*– 40°C to + 70°C*
Humidity (no condensation or icing)	*0% to 95% RH*
Vibration, impact and shock	*EN 54-17:2005, EN 54-18:2005*
IP rating	*IP52*
Standards and approvals	*EN 54-17:2005, EN 54-18:2005*
Dimensions	*60 mm height x 150 mm width x 90 mm depth*
Weight	*239 g*

Table 1: Digital communications protocol compatibility

Protocol	Device Behaviour
XP95† /Discovery†	XP95
CoreProtocol†	Soteria

† Fire control panel dependant

All information in this document is given in good faith but Apollo Fire Detectors Ltd cannot be held responsible for any omissions

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/EU

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

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

Conformity of the Intelligent Switch Monitor with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Connectivity

Refer to Figures 2, 3 and 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

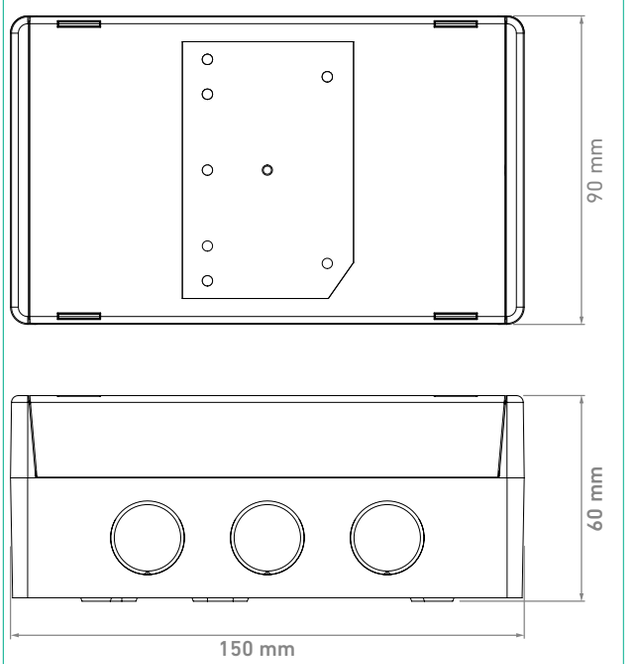


Table 3: Status Indications

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

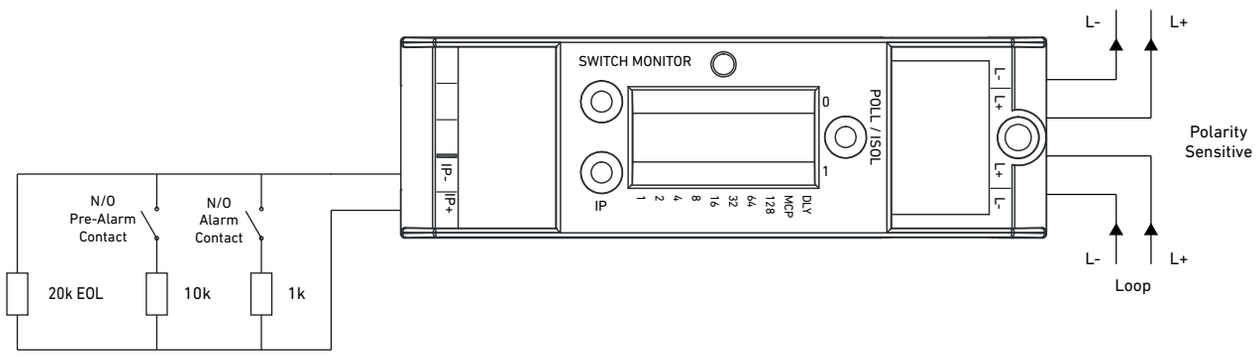


Figure 3: Intelligent Switch Monitor normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

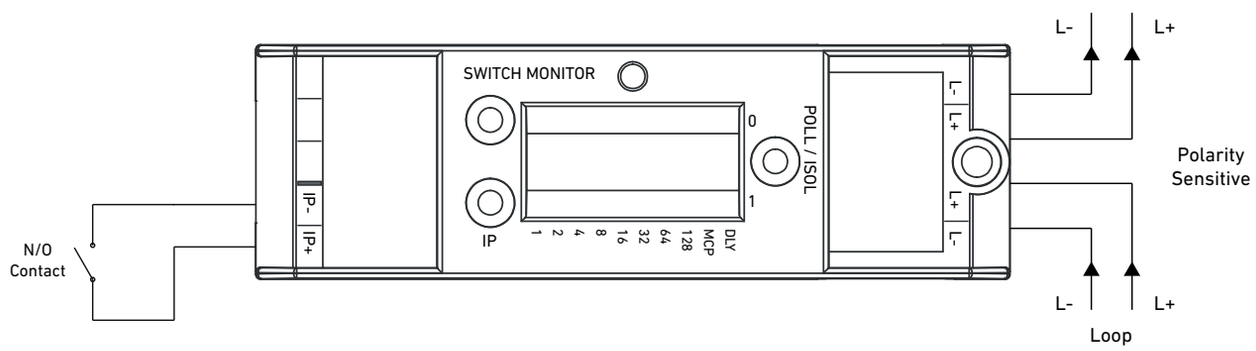


Figure 4: Intelligent Switch Monitor normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)

