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Illumino Ignis Ltd™
LIGHTING & FIRE DESIGN, SUPPLY & SUPPORT

Intelligent Input/Output Unit

Addressable - Devices

Part No. SA4700-102APO

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Product Details

The Intelligent Input/Output Unit provides supervision of one or more normally open contacts connected to a single pair of cables and a set of changeover relay output contacts.

Refer to Table 1 for digital communications protocol compatibility and Table 2 for the Intelligent Input/Output Unit operating modes.



Key Features

- Improved design for ease of wiring meaning faster installation
- Contains controllable isolator *
- Address range 1 - 254 *
- Nine pre-configured modes, including compatibility mode from XP95/ Discovery to CoreProtocol systems *
- Failsafe mode (meets BS 7273-4 requirements)
- Configurable input styles *

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

Technical Specifications

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	3.5 mA
Max current LEDs disabled	500 µA
Relay output contact rating	1 A at 30 V dc or ac
Isolator data	Refer to 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 54-17:2005, 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	244 g

All information in this document is given in good faith but Apollo Fire Detectors Ltd cannot be held responsible for any omissions or errors.
The company reserves the right to change the specifications of products at any time and without prior notice

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Table 1: Digital communications protocol compatibility

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

† Fire control panel dependant

Table 2: Intelligent Twin Switch Monitor operating modes*

Mode	Description
1	DIL Switch XP Mode
2	Alarm delays
3	Output and N/O input (can be equivalent for Output only)
4	Output and N/C input
5	Output with Feedback (N/C)
6	FailSafe Output with Feedback (N/C)
7	FailSafe Output without Feedback
8	Momentary Input Activation Sets Output Relay
9	Input Activation Sets Output

* CoreProtocol enabled systems only

Failsafe

In Failsafe mode the Intelligent Input/Output Unit will activate the on-board relay output without being commanded by the control panel on loss of loop or protocol loss. Failsafe mode is selected via a DIL switch and indicated with an analogue value of 17.

Mechanical Construction

The Intelligent Input/Output Unit (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.

Construction Products Regulation 305/2011/EU

The Intelligent Input/Output Unit 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

EMC Directive 2014/30/EU

The Intelligent Input/Output Unit 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.

Conformity of the Intelligent Input/Output Unit with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Connectivity

Figures 2, 3 and 4 for unit connection information. Refer to the Installation Guide 39215-159 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 Input/Output Unit dimensional drawing

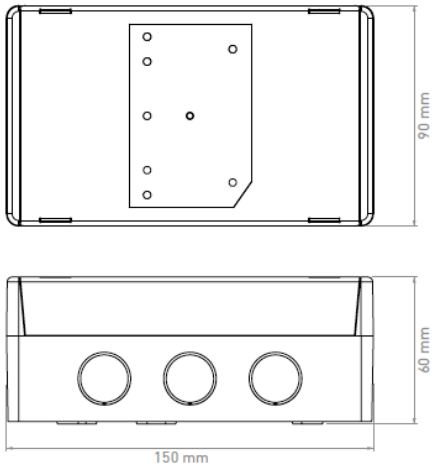


Table 3: Status Indications

Legend	LED Status	Description
RLY	Continuous Red	Relay Active
RLY	Continuous Yellow	Relay Fault
Poll/ISO	Flashing Green	Polling LED
Poll/ISO	Continuous Yellow	Isolator LED
I/P	Continuous Yellow	Input Fault
I/P	Continuous Red	Input Active

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Figure 2: Intelligent Input/Output Unit standard resistive monitoring mode connectivity diagram

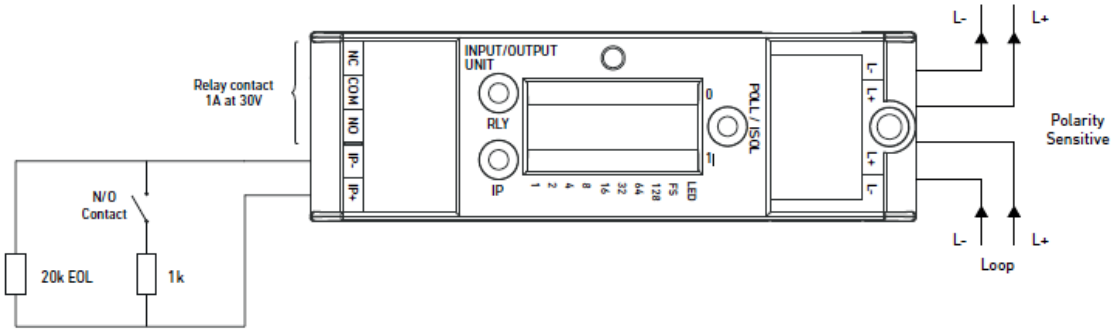


Figure 3: Intelligent Input/Output Unit normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

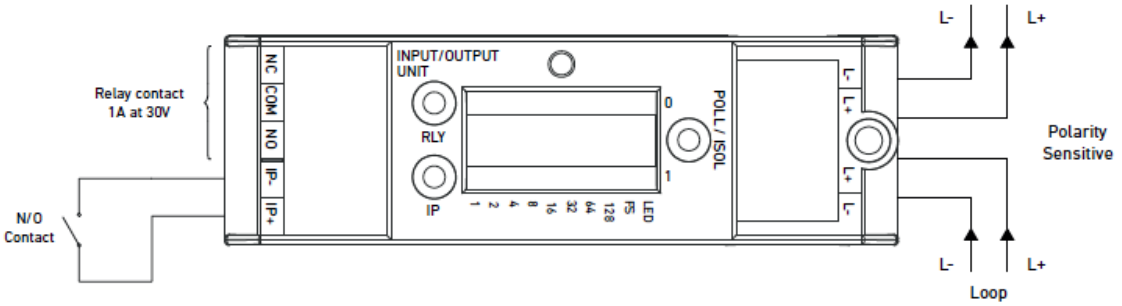
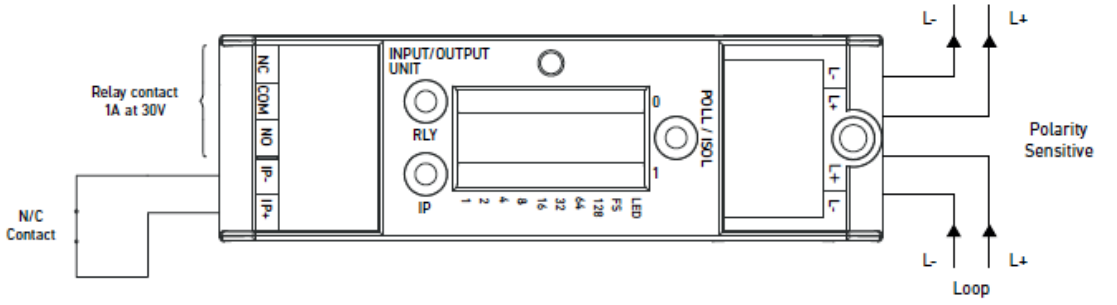


Figure 4: Intelligent Input/Output Unit normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)



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