

IP Fire Series™ Input Output Module

• DXP-IOM

Description

The IP Fire Series™ control system provides for Analog Loop Modules (ALM's) that may be installed throughout a protected facility in any number up to the IPF system maximum of 50 modules. IPF Series™ ALM modules offer analog addressable signaling line (SLC) circuits that may each have up to 126 detectors or 126 addressable control devices in any combination.

The AsBuilt addressable Input Output Module (DXP-IOM) provides for two different types of input and one relay output all on single addressable module yet consumes only one device address.

The DXP-IOM is a loop powered device that incorporates:

1. a supervised input circuit for switch monitoring, or,
2. a non-supervised opto-coupled input (open collector) for the monitoring of 12 or 24VDC input voltages, and,
3. a volt-free relay output

The DXP-IOM connects to the SLC and is programmed via an 8 pin DIL switch (1-7 for addressing, 8 for Class A/B). There are no limitations on the number of DXP-IOM's that may be added to a single SLC loop (up to the SLC maximum of 126 device/detector types).

The supervised inputs are designed to monitor the state of one or more single-pole, volt-free contacts connected on a single pair of cables and may be wired in either a Class A or B (Style D or B) fashion.

The non-supervised opto-coupled open collector input circuit can be used to monitor for the activation of any 12 or 24VDC circuit. Supervision is not required if the connection length is less than 3 feet.

Regardless of which type of input is selected, activation will cause an input event to be generated on the IPF Series control via the SLC connected to the ALM.

The volt-free relay is fired programmatically through the IPF control system and NOT automatically (by simple activation of the input - unless programmed to do). The relay portion of the DXP-IOM may be activated by any other input device on the system independent of the status of the two input circuits located on the same card. This allows the DXP-IOM to truly function as two distinct addressable controls while only occupying a single SLC address point in a cost effective application.

The open connector input is non-supervised with a 30VDC maximum current.

The relay output is a non-supervised, programmable, dry contact with current ratings of 24VDC. 1A:30 VAC .5A (resistive).

These devices all use end of line monitoring resistance of 47kΩ.




Features

- **Opto-coupled, open collector type input monitors 12VDC or 24VDC circuits for activation**
- **Second, supervised input type monitors standard dry contact devices, Class A or B**
- **Volt-free relay output on same device**
- **Inputs and outputs operate independently and are tied to other devices on the IPF system programmatically**
- **Plate mounted for surface/flush mounting in 4" square boxes**
- **Fully supervised**
- **Field programmable**
- **LED for polling/alarm annunciation**
- **DIL switch addressing**
- **Green/RoHS Compliant**

Listings

UL File: S7003
CSFM: 7300-1394:108
MEA: 294-95-E-4

Product	Data Sheet Number	Rev/Revision Date	
IPF Series™ Input Output Module	2812	1.3/ 5/1/2009	

Engineer Specification

The contractor shall furnish and install, where indicated on the plans, addressable interface devices for the monitoring and supervision of contact type devices connected to the Fire Alarm control. The devices shall monitor a normally open dry contact. The contractor shall also furnish and install, where indicated on the plans, addressable interface devices to be used in monitoring any 12VDC or 24VDC circuit whose status/activation is being monitored by the Fire Alarm control. Further, the contractor shall furnish and install, where indicated on the plans, addressable interface devices to be used to drop or activate power to systems being controlled by the Fire Alarm control (e.g., elevator recall, door closure) by means of switching a relay. The addressable interface devices shall communicate to the main fire control via the analog addressable circuit. The addressable interface device must be UL listed and UL listed as compatible with the AsBuilt IP Fire Series network fire control. The addressable interface device shall be As Built Engineered Systems part numbers DXP-IOM.

Technical Data

DXP-IOM:

Dimensions: 4 ½"W x 4 ½"H x 1 ¾"D
Weight: 3 oz
LED visible through fascia plate label
Current Consumption: 600 µA typically
LED on: 4 mA
Relay on: 4mA pulsed for 80ms
Switch on surge current: 3.5mA for 2s
Operating Temp: -4°F to 158°F
Humidity: 0% to 95% (no condensation or icing)
Shock: To UL 864
Vibration: To UL 864

Supervised Switch Monitor Input:

Normally open switch generates alarm on closure.
Contact Resistance: 5kΩ @ 200µA

Opto-Coupled Open Collector Input:

Low: <1.5VDC, High:>10VDC (30VDC max)
OFF <1VDC; ON>10 VDC;
Voltages between 1.5 and 10VDC Indeterminate

Volt-Free Relay Output:

UL De-rated Contact : 2A@30VDC,
.6A@120VAC

Ordering Information

Part Number	Data Sheet	Description
DXP-IOM	2812	Input / Output Monitor (55000-820)

Related Modules


DXP-SDR	2814	Sounder Control Module (55000-825)
DXP-2PID	2816	Dual Priority Input Device (55000-790)
DXP-OCM	2818	Output Control Module (55000-863)
DXP-PIM	2810	Point Identification Module (55000-805)
DXP-MPIM	2810	Mini Point Identification Module (55000-831)
DXP-PID	2810	Priority Input Device (55000-806)
DXP-MPID	2810	Mini Priority Input Device (55000-830)

Related Data Sheets

Discovery Detectors: DISC-P, 2106; DISC-I, 2107; DISC-T, 2108; DISC-M, 2109

XP Detectors: XP-P, 2101; XP-I, 2102; XP-T, 2103; XP-M, 2104

Addressable Base Options: All Bases, 2310

Product Name	Data Sheet Number	Rev/Revision Date	
IPF Series™ Input Output Module	2812	1.3/ 5/1/2009	
As Built Engineered Systems, Inc. 1451 Concord Street Framingham, MA 01701-7782 USA	Phone: (508) 788-8333 Fax: (508) 788-8334 Contact: info@asbuiltes.com Visit: www.asbuiltes.com	