

### Description

Harding fire control systems provides for Addressable Loop Modules (ALM3-IP) that may be installed throughout a protected facility in any number up to the system maximum of 50 modules. Harding ALM3-IP modules offer addressable signaling line (SLC) circuits that may each have up to 126 detectors or 126 addressable control devices in any combination.

The Harding S21 Dual Priority Switch Monitor Module (IOM2103) is an addressable dual switch monitor that is a means of connecting and identifying two conventional monitor point circuits at the main Harding fire control system. IOM2103 switch monitors connect to the SLC, are programmed via an 8 pin DIL switch (1-7 for addressing, 8 for Class A/B), are polarity insensitive and are used to monitor one or two Class A or B (Style D or B) circuits.

The IOM2103 is designed to monitor the state of one or more single-pole, volt-free contacts connected on a single pair of cables on two separate circuits.

Harding IOM2103 switch monitors are available for surface/flush mounting in 4" square boxes.

In standby mode, the IOM2103 monitors its internal circuitry for status of the device itself and supervises both input circuits for faults. In the event a fault is detected, the IOM2103 will report a trouble to the Harding fire control.

The IOM2103 incorporates the priority interrupt feature on each of its two available circuits. Priority interrupt is used where a fast response is required (as with pull stations). Priority switch monitors produce output states of normal, off-normal and alarm. These devices do not produce pre-alarm output states.

### Terminal Block Assignments

TB1 L1 – Loop In/Out

TB5 L2 – Loop In/Out  
L1 and L2 non-polarized

TB3 Switch Monitor Circuit Class A or B

These devices all use end of line monitoring resistance of 47k $\Omega$ .



### Features

- Dual Class A/B Input Circuits on a single address
- Monitors dry contact devices
- Priority interrupt feature for fast response
- Dual LED's visible through the fascia plate label
- Field programmable
- Fully supervised
- Plate mounted for surface/flush mounting in 4" square boxes
- LED for polling/alarm annunciation
- DIL switch addressing
- RoHS Compliant

### Listing

UL File: S36050

## **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 one or two normally open dry contact circuits. The addressable interface devices shall communicate to the main fire control via the addressable circuit. The addressable interface device must be UL listed and UL listed as compatible with Harding network fire controls. The addressable interface device shall be Harding part number IOM2103.

## **Technical Data**

### **S21 Dual Priority Switch Monitor Module:**

Current Consumption: 600  $\mu$ A typically

Single LED on: 4.6 mA

Both LED's on: 9.2mA

### **Dimensions:**

Dimensions: 4 1/2"W x 4 1/2"H x 1 3/4"D

Weight: 3 oz

LED visible through fascia plate label

Operating Temp: -4°F to 158°F

Humidity: 0% to 95% (no condensation or icing)

Shock: To UL 864

Vibration: To UL 864

## **Ordering Information**

Part Number	Description
IOM2103	S21 Dual Priority Switch Monitor Module

## **Related Modules**

Part Number	Data Sheet	Description
IOM2104	DS-IOM2810	S21 Switch Monitor Module
IOM2109	DS-IOM2810	S21 Mini Switch Monitor Module
IOM2105	DS-IOM2810	S21 Priority Switch Monitor Module
IOM2108	DS-IOM2810	S21 Mini Priority Switch Monitor Module
IOM2101	DS-IOM2810	S21 DIN Rail Switch Monitor Module
IOM2106	DS-IOM2812	S21 Switch Monitor I/O Module, Low Voltage
IOM2107	DS-IOM2814	S21 Sounder Control Module
IOM2111	DS-IOM2818	S21 Relay Output Module
IOM2102	DS-IOM2818	S21 Switch Monitor I/O Module, 120V AC (UL)
IOM2110	DS-IOM2818	S21 Switch Monitor I/O Module, 120V AC (UL)

## **Related Data Sheets**

Series 21 Detectors: PHOTO (DET2104), DS-DET2104; HEAT (DET2101), DS-DET2101; MULTI (DET2105), DS-DET2105;

Series 22 Detectors: PHOTO (DET2204), DS-DET2204; HEAT (DET2201), DS-DET2201; MULTI (DET2205), DS-DET2205;

Addressable Base Options: All Bases, DS-DET2310

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9564 Yellowhead Trail NW Tel 780.462.7100  
Edmonton, AB T5G 0W4 Fax 780.450.8396  
[sales@harding-tech.com](mailto:sales@harding-tech.com) [www.harding-tech.com](http://www.harding-tech.com)



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