



INTELLIGENT MODULES

DESCRIPTION

The Eclipse protocol, manufactured by System Sensor, is a peer-to-peer, all digital protocol from that allows for numerous applications such as fire, security, access and HVAC control. Eclipse series intelligent modules provides faster device response time, with more flexibility than ever possible before. This digital, peer-to-peer protocol enables pinpoint accuracy in as little as a quarter second - without interference problems that can plague other systems.

The Eclipse system distributes intelligence to the networked devices. In fact, Eclipse turns every networked device into a peer, capable of generating messages readable by the entire system. Additionally, with Eclipse, no special communication cables are required, making it ideal for retrofit applications.

The isolator versions have on-board short circuit isolators to prevent shorts on the signaling line circuit (SLC) from disabling all devices on the intelligent loop.

Eclipse monitor and control modules can be used to supervise and activate sounders, strobes, door closers, pull stations, waterflow switches, and more. Each module is rigorously designed and tested for electromagnetic compatibility and environmental reliability, in many cases exceeding industry standards. Full size modules mount in a standard 4" x 4" x 2 1/8" junction box. Wiring terminals are easily accessible for troubleshooting purposes. Relay modules are to be designed for activating products connected to an alarm system and the mini monitor module can monitor the wiring to the device for open circuits via an end of line resistor.

55-041/55-046 Monitor Modules are used to monitor the normally open contacts of an auxiliary device. In addition to monitoring the contact, the device will supervise the wiring to the device for open circuits via an end of line resistor. This device is capable of class A or class B operation. Also capable of short circuit detection.

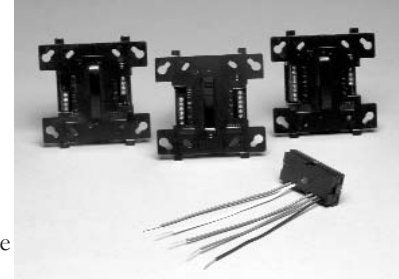
The small size of the **55-045/55-050 Mini Monitor Module** allows it to fit inside devices or junction boxes behind devices. Also capable of short circuit detection.

55-042/55-047 Control Modules are used to switch an external power supply or audio amplifier to notification appliances. The devices will supervise the wiring to the auxiliary device for open and short circuits via an end of line resistor. The control module will also have the capability to monitor the external power input for loss of power (DC voltage supplies only). This module is capable of Class A or Class B operation.

55-043/55-048 Relay Modules are designed for use in activation of products that are connected to an intelligent fire alarm system. It provides two sets of Form C contacts that switch together (one DPDT relay). There is also an input that is capable of monitoring a dry set of contacts for open or closed conditions.

55-052/55-053 Releasing Module are designed to provide reliable operation of a solenoid or Agent Release Module (ARM) for clean agent, carbon dioxide and pre-action sprinkler/deluge system actuation. Each releasing module is protected from inadvertent operation by an intelligent switch, which requires transmission of a complex code before activating the releasing output. This module is capable of providing up to 2.0 amps @ 24 VDC of output power for solenoid applications. The releasing module requires a separate 24 VDC power source in addition to the SLC.

55-051 Configuration IR Tool is a remote control designed to communicate with Eclipse devices via infrared (IR) signals. The remote control will give the user the ability to communicate with the panel and other devices through any selected device on the loop. The 55-051 can read device information such as type, loop, and address along with set loop, address, branch and service date. It can also initiate a walk test and a device test. The 55-051 features a 16-character liquid crystal display and a 17-button keypad.



Configuration IR Tool (55-051)

STANDARD FEATURES/SPECIFICATIONS

- Peer-to-Peer Communication
- Distributed intelligence
- Greater system design freedom
- Digital communication protocol
- Numerous applications (Fire, Security, Access and HVAC Control)
- Fast response time
- Superior noise immunity
- Low standby current
- Mounts to standard 4" junction box
- Wiring terminals easily accessible
- Communicate with the devices via hand-held configuration tool

General Module Specifications

- Operating Voltage: 15-30VDC
- Alarm Current: 2.0 mA (red LED on)
- Temperature Range: 32^o to 120^oF (0^o to 49^oC)
- Relative Humidity: 10% to 93%; non-condensing
- Dimensions:
 - 55-045/55-050: 2.7"W x 1.3"H x 0.6"D
 - Others: 4.26"W x 4.2"H x 1.2"D

Specifications: 55-042/55-047

- Standby Current Avg.: 560 mA max. avg. (continuous broadcasts)
- External Power Supply: 9-80VDC (Normal Range); 0-2VDC (Trouble Range)
- End-of-Line Resistance: 39 k ohms (included)
- Maximum VAC Circuit Wiring Resistance: 100 Ohms
- Standby Current: 500 mA max. avg. (continuous broadcasts)
- Dry Contact Short Circuit Current: 30 mA max. avg.

- Relay Contact Ratings:
 - 3.0 A @ 30VDC resistive non-coded
 - 2 A @ 30VDC resistive coded
 - 0.9 A @ 70.7VAC resistive non-coded
 - 0.7 A @ 70.7VAC inductive (PF=.35) non-coded

Specifications: 55-051

- Dimensions: 1.3"H x 2.2"W x 7.7"L
- Communication Range: Up to 30 feet
- Battery Life: 168 hours (typical usage)
- Operating Temperature Range: 32^o to 122^oF
- Relative Humidity: 10% to 90% RH non-condensing

Specifications: 55-041/55-046

- Standby Current: 485 mA max. (continuous broadcasts)
- IDC Voltage: 5.4VDC max.
- VMaximum IDC Wiring Resistance: 100 ohms

Specifications: 55-045/55-050

- Standby Current:
 - 485 mA max. (continuous broadcasts)
 - 745 mA max. (continuous broadcasts IDC Shorted)
- IDC Voltage: 5.4VDC max.
- Wire Length: 6.5"
- Maximum IDC Wiring Resistance: 100 ohms

AVAILABLE MODELS

Description	Fike Model No.	Manf. Model No.
Non-isolator Versions		
Monitor Module	55-041	EM-1M
Relay Module	55-043	EM-1R
Supervised Control Module	55-042	EM-1SR
Mini Monitor Module	55-045	EM-1MM
Releasing Module	55-052	EM-1RM
Isolator Versions		
Monitor Module	55-046	EM-1MI
Relay Module	55-048	EM-1RI
Supervised Control Module	55-047	EM-1SRI
Mini Monitor Module	55-050	EM-1MMI
Releasing Module	55-053	EM-1RMI
Accessories		
Control Module Barrier	20-1071	
Surface Mount Box	20-1072	
Configuration IR Tool	55-051	EA-CT

