

# Series 2-Wire Loop Test/ Maintenance Module



## Models Available

**2W-MOD2** 2-wire loop test/maintenance module for 2-wire i<sup>3</sup> series standard, sounder, and Form C relay models

(Replaces Model No. 2W-MOD)



## Product Overview

Allows all 2-wire i<sup>3</sup>™ detectors to be used on any compatible 2- or 4-wire fire alarm control panel

Interprets the i<sup>3</sup> remote maintenance signal

Provides visual indication and an output relay when a detector on the loop requires cleaning

Initiates the EZ Walk loop test

Provides Style D wiring on IDC loops

Green, red, and yellow LEDs indicate

- Loop communication status
- Maintenance alert
- Freeze trouble
- Alarm
- EZ Walk test enabled
- Wiring fault

System Sensor's 2W-MOD2 two-wire loop test/maintenance module maximizes the benefits of the i<sup>3</sup>™ series smoke detectors, by offering detector remote maintenance signaling and EZ Walk loop testing capabilities.

**Installation ease.** The 2W-MOD2 mounts to a 4"-square back box for quick and easy installation. Terminal blocks with durable SEMS screws assure a reliable connection.

**Intelligence.** The 2W-MOD2 allows communication to 2-wire i<sup>3</sup> detectors with any listed fire alarm control panel. This in turn enables i<sup>3</sup> detectors to initiate a remote maintenance signal when they are in need of cleaning, and to provide a visual indication of this condition at the module and at the panel. The 2W-MOD2 also features the EZ Walk loop test for 2-wire i<sup>3</sup> series detectors. This function verifies the entire initiating loop wiring with just the press of a button.

**Instant inspection.** The 2W-MOD2 includes three LEDs — green, red, and yellow — that provide status indication for the loop. These LEDs indicate the following:

- Loop communication status
- Maintenance alert
- Alarm
- Freeze trouble
- EZ Walk test enabled
- Wiring fault



## Architect/Engineer Specifications

Loop test/maintenance module shall be a System Sensor i<sup>3</sup> series model number 2W-MOD2, listed to Underwriters Laboratories UL 864 for Control Units for Fire Protection Signaling Systems. The module shall include provisions for mounting to 4"-inch square back boxes.

Wiring connections shall be made by means of SEMS screws. The module shall provide three LED indicators which will blink or illuminate to indicate communication status, maintenance alert, alarm or freeze trouble conditions, and EZ Walk loop test mode. The module

shall allow communication to 2-wire i<sup>3</sup> detectors with any UL listed fire alarm control panel. The 2W-MOD2 shall offer provisions for Style D wiring on IDC loops, and shall provide a loop testing capability to verify the initiating loop wiring.

## Electrical Specifications

### Operating Voltage

Nominal: 12/24 V  
Min.: 8.5 V power limited  
Max.: 30 V power limited

### Maximum Ripple Voltage

30% of applied voltage (peak to peak)

### Maximum Standby Current

30 mA

### Maximum Alarm Current

90 mA

### Maximum Maintenance Current

53 mA

### Alarm Contact Ratings

0.5 A @ 36VDC, Resistive

### Maintenance Contact Ratings

2 A @ 30VDC, Resistive

## LED Modes

LED Color	Status	Condition
Green LED	On	Power on. Detectors on loop do not have communication capability.
	Blinking 1 sec. on / 1 sec. off	Power on. Detectors on loop are communicating normally.
	Off	Power not applied or module not in operation.
Red LED	On	Detector on loop in alarm.
	Blinking 1 sec. on / 1 sec. off	One or more detector on loop is in need of maintenance or is in freeze trouble.
Yellow LED	On	Loop wiring fault exists.
	Blinking 0.5 sec. on / 0.5 sec. off	EZ Walk test mode.

## Power Up Sequence for LED Indication

Condition	Duration
Initial LED status indication	2 minutes
EZ Walk test available	6 minutes after reset

## Physical Specifications

### Operating Temperature Range

14°F–122°F (–10°C to 50°C)

### Operating Humidity Range

0 to 95% RH non-condensing

### Input Terminals

14–22 AWG

### Dimensions

Height: 4.5 inches (114 mm)

Width: 4.0 inches (101 mm)

Depth: 1.25 inches (32 mm)

### Weight

8 oz. (225 grams)

### Mounting

4-inch square back box

## Ordering Information

Model	Description
2W-MOD2	2-wire loop test/maintenance module for 2-wire i <sup>3</sup> series standard, sounder, and Form C relay smoke detectors

## System Sensor Sales and Service

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### System Sensor Europe

Ph: 44.1403.276500  
Fx: 44.1403.276501

### System Sensor in China

Ph: 86.29.8832.0119  
Fx: 86.29.8832.5110

### System Sensor in Singapore

Ph: 65.6273.2230  
Fx: 65.6273.2610

### System Sensor – Far East

Ph: 85.22.191.9003  
Fx: 85.22.736.6580

### System Sensor – Australia

Ph: 613.54.281.142  
Fx: 613.54.281.172

### System Sensor – India

Ph: 91.124.637.1770 x.2700  
Fx: 91.124.637.3118

### System Sensor – Russia

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