

GENERAL

The system sensor I³ series smoke detectors represent a significant advancement in conventional detection. The I³ family is founded on three principles: installation ease, intelligence, and instant inspection.

The I³ series redefines installation ease with its plug-in design. This allows an installer to pre-wire the bases included with the heads. The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of back box mounting methods as well as direct mounting with drywall anchors. To complete the installation, I³ heads plug-in to the base with a simple action.

I³ detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the I³ line, to minimize nuisance alarms. When connected to the 2W-MOD loop test/maintenance module, or an I³ ready panel (MS-2 & MS-4) equipped with the I³ protocol, 2-wire I³ detectors are capable of generating a remote maintenance signal when they are in need of cleaning. This signal is indicated via an LED located at the module and/or the panel. To read the sensitivity of I³ detectors, the SENS-RDR is a wireless device that displays the sensitivity in terms of percent per foot obscuration.

The I³ series provides wide angle red and green LED indicators for instant inspection of the detector condition, indicating: normal standby, out-of-sensitivity, alarm, or freeze trouble conditions. When connected to the 2W-MOD loop test/maintenance module or an I³ ready panel (MS-2 & MS-4) with the I³ protocol, the EZ Walk loop test feature is available on 2-wire I³ detectors. This feature verifies the initiating loop wiring by providing LED status indication at each detector.

FEATURES

- Built-in remote maintenance signaling.
- Drift compensation and smoothing algorithms.
- Stop-Drop 'N Lock attachment to base.
- Simplified sensitivity measurement.
- Plug-in detector line - mounting base included.
- Large wire entry port.
- In-line terminals with SEMS screws.
- Mounts to octagonal and single-gang backboxes, 4-square backboxes, or direct to ceiling.
- Removable detector cover and chamber for easy cleaning.
- Wide angle, dual color LED indication.
- Loop testing via EZ Walk feature.
- Built-in test switch.



California
State Fire
Marshal
7272-1209:210



MEA



SPECIFICATIONS

- Operating voltage: 12/24 VDC (peak).
- Standby current:
 - 2-wire: 50 µA maximum average
 - 4-wire: 50 µA maximum average
- Maximum Alarm Current
 - 2-wire: 130 mA limited by control panel
 - 4-wire: 20 mA @12V, 23mA @24V
- Alarm Contact Ratings
 - 2-wire: n/a
 - 4-wire: 0.5 A @ 30V AC/DC
- Operating Temperature Range:
 - 2W-B and 4W-B: 32°F - 120°F (0°C - 49°C).
 - 2WT-B and 4WT-B: 32°F - 100°F (0°C - 37.8°C).
- Operating Humidity Range: 0% to 95% RH non-condensing.
- Thermal Sensor: 135°F (57.2°C) fixed.
- Freeze Trouble: 2WT-B and 4WT-B only: 41°F (5°C).
- Sensitivity: 2.5% /ft. nominal.
- Input Terminals: 14-22 AWG.
- Dimensions (including base) 5.3 inches (127 mm) diameter, 2.0 inches (51 mm) height.
- Weight: 6.3 Oz. (178 grams).
- Mounting: 3.5-inch octagonal back box
4-inch octagonal back box
Single gang back box
4-inch square back box with plaster ring
Direct mount to ceiling



LED MODES

LED MODE	GREEN LED	RED LED	POWERUP SEQUENCE FOR LED INDICATION	
Power up	Blink every 10 seconds	Blink every 10 seconds	Condition	Duration
Normal (standby)	Blink every 5 seconds	off	Initial LED status indication	80 seconds
Out of sensitivity	off	Blink every 5 seconds		
Freeze trouble	off	Blink every 10 seconds		
Alarm	off	Solid		

ORDERING INFORMATION

Model	Model (Canadian)	Thermal	Wiring	Alarm Current
2W-B	C2W-BA	No	2-wire	130 mA max. limited by control panel
2WT-B	C2WT-BA	Yes	2-wire	130 mA max. limited by control panel
4W-B	C4W-BA	No	4-wire	20 mA @ 12V, 23mA @24V
4WT-B	C4WT-BA	Yes	4-wire	20 mA @ 12V, 23mA @24V
2WTA-B	C2WTA-BA	Yes	2-wire	130 mA max. limited by control panel
2WTR-B	C2WTR-BA	Yes	2-wire	130 mA max. limited by control panel
4WTA-B	C4WTA-BA	Yes	4-wire	35 mA
4WTR-B	C4WTR-BA	Yes	4-wire	35 mA
4WTAR-B	C4WTAR-BA	Yes	4-wire	50 mA
4WITAR-B	C4WITAR-BA	Yes	4-wire	50 mA

Model	Description
2W-MOD	2-wire loop test / maintenance module
SENS-RDR	Sensitivity reader
RT	Removal / replacement tool
A77-AB2	Retrofit adapter bracket
CRRS-MODA	Reversing relay/synchronization module
C2W-MOD2A	2-wire loop test/maintenance module
CSENS-RDRA	Sensitivity reader