

by Honeywell

# i<sup>3</sup> Series Detectors

## Description

The System Sensor<sup>®</sup>, i<sup>3</sup> Series smoke detectors represent a significant advancement in conventional detection. The i<sup>3</sup> family is founded on three principles: installation ease, intelligence, and instant inspection.

The i<sup>3</sup> Series redefines installation ease with its plug-in design. This design allows an installer to pre-wire the bases included with the heads. The large wire entry port and the in-line terminals provide ample room to neatly route the wiring inside the base. The base accommodates a variety of backbox mounting methods as well as direct mounting with drywall anchors. To complete the installation, the i<sup>3</sup> heads plug-in to the base.

The i<sup>3</sup> detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the i<sup>3</sup> line, to minimize nuisance alarms. When the i<sup>3</sup> is connected to the following, the 2-wire, i<sup>3</sup> detectors are capable of generating a remote maintenance signal.

- 2W-MOD Loop Test/Maintenance Module
- i<sup>3</sup> ready panel (MS-2 and MS-4) equipped with the i<sup>3</sup> protocol

The remote maintenance signal indicates when the i<sup>3</sup> required cleaning and it is indicated via an LED located at the module and/or the panel. To read the sensitivity of i<sup>3</sup> detectors, the SENS-RDR is a wireless device that displays the sensitivity in terms of percent per foot obscuration.

The i<sup>3</sup> Series provide wide angle, red and green LED indicators that allow you to instantly inspect the following detector conditions:

- normal standby
- alarm
- out-of-sensitivity
- freeze trouble condition

When the i<sup>3</sup> is connected to the 2W-MOD Loop Test/Maintenance Module or an i<sup>3</sup> ready panel (i.e., MS-2 and MS-4) with the i<sup>3</sup> protocol, the EZ Walk loop test feature is available on 2-wire i<sup>3</sup> detectors. This feature verifies the initiating loop wiring by providing the LED status indication at each detector.

## Intelligent Conventional Smoke Detector Series



i<sup>3</sup>

## Features

- Constructed of built-in remote maintenance signaling and a built-in test switch.
- Provides drift compensation and smoothing algorithms.
- Contains a Stop-Drop 'N Lock attachment to the base.
- Offers simplified sensitivity measurement.
- Includes plug-in detector line - mounting base included.
- Has a large wire entry port.
- Installs with in-line terminals with SEMS screws.
- Mounts to octagonal and single-gang backboxes, 4" (10.16 cm) square backboxes, or direct to ceiling.
- Designed with a removable detector cover and chamber to simplify cleaning.
- Equipped with a wide angle, dual color LED indication.
- Uses loop testing via EZ Walk feature.

SIGNALING



LISTED

S4011



APPROVED

3032010



7272-1653:0152 S5512

## Specifications

<b>Operating Voltage:</b>	12/24 VDC (peak)
<b>Standby Current:</b>	2-wire: 50 mA maximum average 4-wire: 50 mA maximum average
<b>Maximum Alarm Current:</b>	2-wire: 130 mA limited by control panel 4-wire: 20 mA @ 12 V, 23 mA @ 24V
<b>Alarm Contact Ratings:</b>	2-wire: n/a 4-wire: 0.5 A @ 30 V AC/DC
<b>Operating Temperature Range:</b>	
<b>2W-B and 4W-B:</b>	32°F – 120°F (0°C – 49°C)
<b>2WT-B and 4WT-B:</b>	32°F – 100°F (0°C – 37.8°C)
<b>Operating Humidity Range:</b>	0% to 95% RH non-condensing
<b>Thermal Sensor:</b>	135°F (57.2°C) fixed
<b>Freeze Trouble:</b>	2WT-B and 4WT-B only: 41°F (5°C)
<b>Sensitivity:</b>	2.5% /ft. nominal
<b>Input Terminals:</b>	14 – 22 AWG
<b>Dimensions (including base):</b>	5.3 inches (127 mm) diameter, 2.0 inches (51 mm) height
<b>Weight:</b>	6.3 oz. (178 grams)
<b>Mounting:</b>	3.5-inch (8.8 cm) octagonal backbox 4-inch (10.16 cm) octagonal backbox. Single-gang back box 4-inch (10.16 cm) square backbox with plaster ring. Direct mount to ceiling.

## Ordering Information

Part Number	Thermal	Wiring	Alarm	Current
<b>2W-B</b>	No	2-wire	130 mA max. limited by control panel	
<b>2WT-B</b>	Yes	2-wire	130 mA max. limited by control panel	
<b>4W-B</b>	No	4-wire	20 mA @ 12V, 23mA @24V	
<b>4WT-B</b>	Yes	4-wire	20 mA @ 12V, 23mA @24V	
<b>2WTA-B</b>	Yes	2-wire	130 mA max. limited by control panel	
<b>2WTR-B</b>	Yes	2-wire	130 mA max. limited by control panel	
<b>4WTA-B</b>	Yes	4-wire	35 mA	
<b>4WTR-B</b>	Yes	4-wire	35 mA	
<b>4WTAR-B</b>	Yes	4-wire	50 mA	
<b>4WITAR-B</b>	Yes	4-wire	50 mA	

Part Number	Description
<b>2W-MOD</b>	2-wire loop test/maintenance module.
<b>SENS-RDR</b>	
<b>RT</b>	Removal / replacement tool
<b>A77-AB2</b>	Retrofit adapter bracket
<b>CRRS-MODA</b>	Reversing relay/synchronization module.
<b>CSENS-RDRA</b>	Sensitivity reader

### GAMEWELL-FCI