



Harrington Signal Inc.  
2519 4th Avenue, Moline, Illinois 61265  
P.O. Box 590, Moline, Illinois 61266-0590  
Phone: (800) 577-5758 Local: (309) 762-0731 Fax: (309) 762-8215  
Internet: [www.harringtonfire.com](http://www.harringtonfire.com)

**IS800**  
I-Spy Heat Detector



### Description

The IS800 heat detector has a common profile with the ionization and photo smoke detector, but has a low air flow resistance case made of self extinguishing white polycarbonate.

The IS800 Analog Addressable Thermal Sensors are designed to provide the highest effectiveness by utilizing the latest technology.

### Operation

The IS800 heat detector uses a single thermistor to sense the air temperature at the detector position. The thermistor is connected in a resistor network, which produces a voltage output dependent on the temperature. The design of the resistor network, together with processing algorithm in the micro-controller, gives an approximately linear characteristic from 50F to 176F. This line-arsed signal is further processed, depending on the response mode

selected, and converted to an analogue output. A detector may be given an "R" or "S" suffix. The "R" suffix indicated that the detector has been shown to have a rate-go rise characteristic. Such a detector will still give a rapid response even when starting from an ambient temperature well below its typical application temperature.

This type of detector is therefore suitable for areas such as unheated warehouses in which ambient temperature may be very low for long periods. The "S" suffix indicates that the detector will not respond below its minimum static response temperature even when exposed to high rates of rise of air temperature. This type is therefore suitable for areas such as kitchens and boiler rooms where large, rapid temperature changes are considered normal.



### Features

- Compatible with Harrington FireSpy® Tracker 1000, 2000, and 8000 Intelligent Panels
- 5 operating modes
- Drift Compensation
- Fits into 4" bases or 6" EZ Fit bases
- Address is set by X-Pert card and stored in base
- Alarm flag for fast alarm reporting
- Fixed point or rate-of-rise function

### Ordering Information

| Model Number | Part Number | Description                |
|--------------|-------------|----------------------------|
| IS800        | IS800       | Addressable Heat Detector  |
| IS804        | IS804       | 4" Mounting Base           |
| IS807        | IS807       | 6" Low Profile Relay Base  |
| IS808        | IS808       | Isolator Base              |
| IS809        | IS809       | 6" EZ Fit Low Profile Base |
| IS821        | IS821       | Sounder Base               |
| IS840        | IS840       | Pre-addressed X-Pert Cards |
| IS841        | IS841       | Blank X-Pert Cards         |
|              |             |                            |



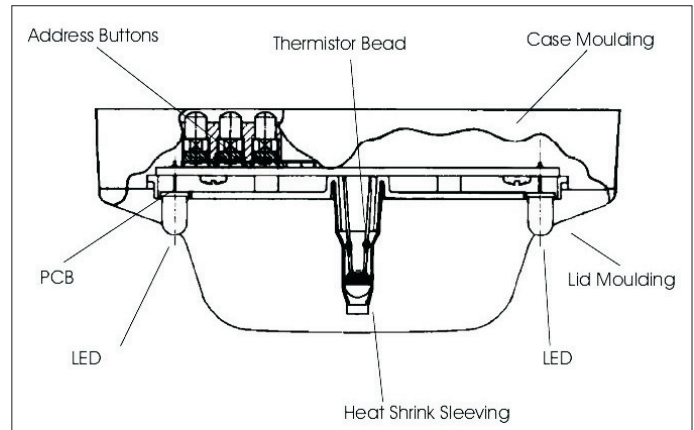
**IS800**  
I-Spy Heat Detector

### Dimensions

Diameter: 3.94"      Weight: 2.3oz  
Height: 1.65"      Det. Inbase: 3.5oz

### Materials Housing

White polycarbonate  
Rate to UL94  
Terminate nickel plated  
Stainless steel



### Engineering Specifications

The thermal sensor shall be Harrington Signal IS800, where indicated on the plans, with one of the several addressable mounting base options available. The combination sensor head and twist-lock mounting base shall be UL listed and UL Listed as compatible with the FireSpy® Tracker 1000, 2000 and 8000 Addressable Fire Alarm Control Panels. The base shall permit free interchange of sensor heads without requiring any additional wiring or additional programming of the head or base. The sensor shall contain an integral LED that shall latch in when the unit goes into alarm.

| Mode<br>F=Fixed<br>RR=Rate-of-Rise | Application<br>Temperature °F |      | Static Response<br>Temperature °F |      |      |
|------------------------------------|-------------------------------|------|-----------------------------------|------|------|
|                                    | Typ                           | Max  | Min                               | Typ  | Max  |
| 1 F & RR                           | 77°                           | 122° | 129°                              | 134° | 149° |
| 2 F & RR                           | 77°                           | 122° | 129°                              | 141° | 158° |
| 3 F                                | 77°                           | 122° | 129°                              | 141° | 158° |
| 4 F & RR                           | 131°                          | 176° | 183°                              | 194° | 212° |
| 5 F                                | 131°                          | 176° | 183°                              | 194° | 212° |

For air temperatures in the range 59°F to 131°F, the analogue value for a detector in mode 1 will correspond approximately to the air temperature.

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice. Quality manufactured for Harrington Signal Inc. by Apollo.