

# Eclipse™ Series Intelligent Low-Profile Plug-in Detectors



## Models Available

ED-P/ED-PI	Photoelectric Smoke Detector
ED-PT/ED-PTI	Photoelectric with Thermal
ED-T/ED-TI	Fixed Temperature/ROR/Hi-Temp Thermal Detector
ED-I/ED-II	Ionization Smoke Detector
(I)	Suffix indicates models with built in isolators

## Mounting Bases

EBF/EBFI	Flanged Mounting Base
EB/EBI	Flangeless Mounting Base
RMK400	Recessed Mounting Kit
SMK400E	4" Flangeless Surface Mounting Kit
AIO-29-400	6" Flanged Surface Mounting Kit

## Specialty Bases

EBS	Sounder Base with Temporal Tone Selection
EBR	Relay Base

## Accessories

F110	Retrofit Flange
RA400Z	Remote LED Annunciator
XR2B	Detector Removal Tool (T55-127-000 included)
XP-4	Extension for XR2 (5-15 ft.)
T55-127-000	Detector Removal Head
EA-CT	Configuration Tool



## Product Overview

### Sleek, low-profile design

### Distributed intelligence

### Greater system design freedom

### Peer to peer communication

### Digital communication protocol

### Numerous applications (Fire, Security, Access and HVAC control)

### Fast response time

### Superior noise immunity

### Low standby current

### Communicate with the devices via hand-held configuration tool

The System Sensor Eclipse™ Series is a peer-to-peer, all digital protocol that allows for numerous applications, such as fire, security, access and HVAC control. Eclipse provides faster device response time, with more flexibility than ever possible before. In addition, this digital, peer-to-peer protocol is more resilient to other types of systems because of its significantly high noise immunity.

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.

**Model ED-P/ED-PI** photoelectric detectors and **Model ED-I/ED-II** ionization detectors have state-of-the-art sensing chambers that are engineered to sense smoke produced by a wide range of combustion sources. The sensing chambers employ features that minimize the effects of settled dust on their performance. The detectors are designed with tri-color LED's to indicate detector status and can be programmed to make the LED's blink or be steady green, amber or red. Dual electronic thermistors add 135°F fixed temperature thermal sensing on the ED-PT/ED-PTI models.

**Models ED-T/ED-TI** are spot-type heat detectors designed to be programmable for a setpoint range of 135°F to 174°F for ordinary detection or 175°F to 190°F for intermediate detection. Detectors in the ordinary range may be programmed for either fixed or 15°F rate of rise operation.

The **EA-CT** is designed to communicate with Eclipse devices via infrared signals. The configuration tool will give the user the ability to communicate with the panel and other devices through any selected device on the loop. The EA-CT can read device information such as type, loop, address and sensitivity along with set loop, address, branch and service date. It can also initiate a walk test and a device test. The EA-CT features a 16-character liquid crystal display and 17-button keypad.

## Detector Specifications

### Height

2.1 inches (51 mm)

### Diameter

6.1 inches (155 mm)  
installed in EBF/EBFI base

4.1 inches (104 mm)  
installed in EB/EBI base

### Shipping Weight

Heat: 4.8 oz. (136 g)  
Photo/Photo with Heat and Ion:  
5.2 oz. (147 g)

### Operating Temperature Range

Photo and Ion: 32° to 120°F (0° to 49°C)  
Photo with Thermal: 32° to 100°F  
(0° to 38°C)  
Thermal: -4° to 100°F (-20° to 38°C);  
135°F to 174°F setpoint  
High Temperature Thermal:  
-4 to 150°F (-20°C to 66°C);  
175°F to 190°F setpoint

### Spacing for Thermal Detectors

Detectors set between 135°F to 155°F  
or 175°F to 190°F : 50 foot spacing

Detectors set between 156°F to 174°F:  
15 foot spacing

### Relative Humidity

10% – 93% RH noncondensing

### Thermal Ratings

Fixed Temperature Setpoint:  
135°F (57°C)

Rate of Rise Detection: 15°F/min.  
(8.3°C/min.)

High Temperature Heat: 190°F (88°C)

### Voltage Range

15 – 30 volts DC peak

### Standby Current (max. avg.)

Thermal: 451  $\mu$ A @ 24 VDC  
(continuous broadcasts)

Photo/Photo with Thermal: 481  $\mu$ A @  
24 VDC (continuous broadcasts)

Ion: 314  $\mu$ A @ 24 VDC  
(continuous broadcasts)

### LED Current (max.)

5.4 mA @ 24 VDC (on)

## EA-CT Specifications

### 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°F to 122°F (0°C to 50°C)

### Relative Humidity

10-90% RH noncondensing

## Accessories



## System Sensor Sales and Service

### System Sensor Headquarters

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### System Sensor Canada

Ph: 905.812.0767  
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### System Sensor Europe

Ph: 44.1403.891920  
Fx: 44.1403.891921

### 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

Ph: 70.95.937.7982  
Fx: 70.95.937.7983