

## FEATURES

- Digital Communication
- Photoelectric Smoke Detector
- Heat Detector
- Multi Smoke/Heat Detector
- Remote LED
- Automatic Type Identification
- Address Confirmation
- Parity Error Check
- Evax Proprietary Protocol
- Quick Detect Alarm
- Surface Mount Component Design
- Switch Addressing
- 254 Devices per Loop Capability
- Compatible with Evax Multi Protocol Addressable Fire Alarm Control Panels

## OPERATION

The choosing of a detector follows a well established principle on design. The type of detector selected should depend upon the fire risk, fire load, and type of environment where the sensor is to be placed, Smoke detectors are suggested for general use giving the highest level of protection.

All EF sensors transmit an analog value in a Digital format back to the Evax Fire Alarm Control Panel for processing and operation.

## DESCRIPTION

The EF Series of fire intelligent detectors are advanced in design, improved in performance, and have unique features that benefit the installer and users. All have an unobtrusive profile, a zero insertion force, user friendly addressing and extended data and alarm features.

## ADDRESSING

The addressing of the detectors is accomplished by setting the switch to the associated binary number of the address required.

## EVAX EF Series Addressable Sensors



Listed to UL 268, 521

### EF-PH Optical Detector

The EF-PH optical sensor uses an internal pulsing LED and a photo-diode at an obtuse angle. In the event of smoke entering the chamber, the light pulse from the LED will be scattered and registered by the photo-diode. The voltage is measured and the detector's microprocessor analyzes the data and delivers an analog value to the panel which determines whether the atmosphere is a pre-alarm status, alarm or dirty.

### EF-TH Thermal Heat Detector

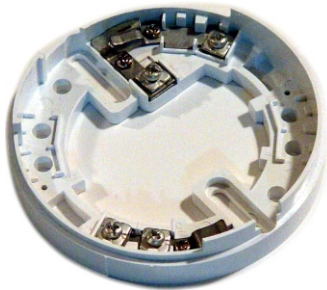
The Heat Detector has a low air-flow resistant case for good contact between the sensing thermistor and the surrounding air. Temperature is measured by a single thermistor network which gives a voltage output proportional to the external air temperature. The signal is processed and transmitted digitally to the Fire Panel.

### EF-MH Multisensor Smoke/Heat Detector

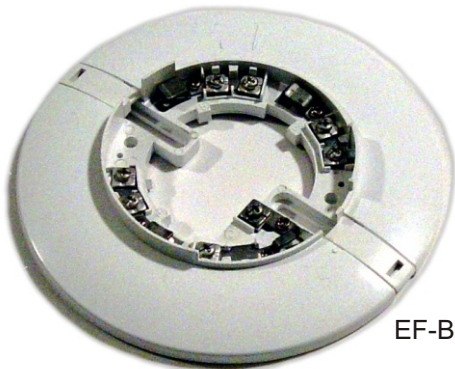
The Multisensor utilizes both optical and heat detection whose outputs are combined to give the final analog value to the Fire Panel.

### ELELECTRICAL SPECIFICATION:

Standby current:	500 micro amps (PH, TH, MH)
Alarm current	5 mA LED on
Operating Voltage	17-28 VDC
SLC Styles	4, 6, or 7
Supply Wiring	two-wire supply
Dimension	4.0 x 1.8 in. (100 x 46 mm)
Weight	3.7 oz (105 g)
Alarm indicator	Dual Red LED's
Termination	Screw Terminals
Operating Temperature	-14 to 100° F (-10 to 38° C)
Humidity	10% to 93% relative humidity



EF-B4



EF-B6

### Engineering Specification:

The detector shall be capable of several mounting base operation options. The photoelectric detector shall be mechanically addressed; detector base shall permit change of detector without rewiring.

The detector shall contain integral LED that will latch in when the unit goes into alarm. RF suppression techniques shall be employed to minimize false alarms. The LED shall be remotely indicated as shown on plans. The detector shall transmit using digital protocol and shall be Evax part number EF-PH, -TH, -MH as indicated on plans.

### How to Order:

<b>EF-PH</b>	Photo Addressable Smoke Detector
<b>EF-TH</b>	Heat Sensor Addressable Detector
<b>EF-MH</b>	Multisensor Smoke/Heat Addressable detector
<b>EF-B4</b>	4" Base
<b>EF-B6</b>	6" Base