

## Features

- ▶ 2 Flashing LEDs
- ▶ Rejection of Transient Signals
- ▶ 360° Visibility in Alarm



*F1000-450 Discovery Heat Detector*

## Operating Principles

The F1000-450 Discovery Heat Detector is an analog addressable device that has a common profile with the F1000-550 Discovery Ionization and F1000-650 Discovery Photoelectric Smoke Detectors but has a low air flow resistance case made of self-extinguishing white polycarbonate. The Heat Detector uses a single thermistor to sense the air temperature at the detector position. The thermistor is connected in a resistor network which provides a voltage output proportional to the external air temperature.

## Approvals and Listings

Underwriters Laboratories (File No. S6350)  
Fire Department - City of NY COA #6051

## Electrical Description

The F1000-450 is designed to be connected to a two wire loop circuit carrying both data and a 17V to 28V DC supply. The detector is connected to the incoming and outgoing supply via terminals L1 & L2 in the mounting base. A remote LED indicator may be connected between the R+ & R- terminals.



# Electrical Specifications

Specifications are typical and given at 24V, 23°C and 50% relative humidity unless otherwise specified.

<b>Detector Type:</b>	F1000-450 Discovery Heat Detector Rate of Rise Ordinary Heat Detector
<b>Detection Principle:</b>	Heat sensitive resistance
<b>Smoke Sampling Frequency:</b>	Continuous
<b>Supply Wiring:</b>	Two wire supply
<b>Terminal Functions:</b>	L1 and L2; supply in and out connections +R; remote indicator positive connection (internal 2.2K $\Omega$ resistance to positive) -R; remote indicator negative connection (internal 2.2K $\Omega$ resistance to negative).
<b>Operating Voltage:</b>	17 to 28 VDC
<b>Modulation Voltage at Detector:</b>	5 to 9 Volts peak to peak
<b>Quiescent Current:</b>	400 $\mu$ A
<b>Power-up Surge Current:</b>	1mA
<b>Maximum Power-up Time:</b>	10 seconds
<b>Operating Temperature:</b>	0°C to 49°C
<b>Alarm Indicator:</b>	2 red Light Emitting Diodes (LEDs)
<b>Alarm Current,LED illuminated:</b>	3.5mA
<b>Remote Output Characteristics:</b>	Connects to positive line through 4.5K $\Omega$ (5mA maximum)
<b>Humidity:</b>	0% to 95% relative humidity (no condensation)
<b>Dimensions:</b>	4 in x 1.65 in (diameter x height)
<b>Weight:</b>	3.0 oz.
<b>Materials:</b>	Housing: White polycarbonate V-O rated to UL 94 Terminals: Stainless Steel, nickel plated

# Ordering Information

Model No.	Part No.	Description
F1000-450	75162	Discovery Heat Detector

It is our intention to keep the product information up to date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information contact: FIRECOM, INC.