



## Conventional Detection Devices

### Thermal Heat Detector Model HI121

#### ARCHITECT AND ENGINEER SPECIFICATIONS

- Magnet-test feature
- Incorporates one (1) state-of-the-art thermal sensor for uniform response and positioning
- Available optional relay base
- Available optional sounder base, providing an alert and evacuation signal
-  UL521 Listed,  ULC S530 Listed; FM, CSFM Approved



#### Product Overview

Model HI121 from Siemens — Fire Safety is a thermal detector that comes with a new magnet-test feature. The magnet-test feature allows for Model HI121 to be tested without the use of a heat gun, providing quick testing for installers and test personnel to prove the integrity of the wiring and proper connection to the fire alarm control panel (FACP).

An indication of supervision status is provided by Siemens Fire's unique (3) three-color light-emitting diode (LED) provided locally on the detector — and optionally with the various remote LED indicators.

#### Ratings

##### Environmental:

<b>Operating Temperature:</b>	32°F (0°C) — 100°F (38°C)
<b>Humidity:</b>	Up to 95% relative humidity, non condensing
<b>Alarm Temperature:</b>	135°F (57°C)
<b>Air Pressure:</b>	No effect
<b>Air Velocity:</b>	0 — 4000 feet / minute [for open-area protection and direct, in-duct application]

##### Electrical:

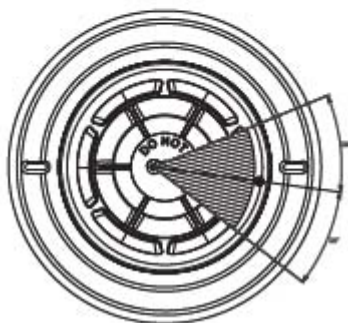
<b>Voltage:</b>	16 — 27 VDC
<b>Ripple:</b>	3V (peak to peak)
<b>Supervisory Current:</b>	100µA
<b>Alarm Current:</b>	30 — 50mA
<b>Start-Up Time:</b>	30 seconds, max.



## Mounting Diagrams



**Model HI121**  
(with TM121 Test Magnet)



**Model TM121**  
(Test-magnet placement)

## Details for Ordering

Model Number	Part Number	Description
HI121	S54372-F3-A1	Thermal Heat Detector
TM121	S54370-S12-A1	Test Magnet
OH121	S54372-F2-A1	Multi-Sensor Smoke Detector
OP121	S54372-F1-A1	Photoelectric Smoke Detector
DB-11	500-094151	Low-Profile Surface-Mount Base
DB-11E	500-094151E	Smaller-Diameter Detector Base
RLC-11	500-694625	Remote LED Ceiling Mount Detector, red
RLW-11	500-694626	Remote LED Wall Mount Detector, red
RR-11	500-694922	Relay Module
RSAC-11	500-694935	Remote, Multi-Color LED: Ceiling Mount
RSAC-11	500-695101	Remote, Multi-Color LED: Wall Mount

STI-9604	— —	STI Mechanical Protection Guard
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See: [www.STI-USA.com](http://www.STI-USA.com) for further details.

## LED Indicator Operation



Flash Color	Condition	Flash Interval (in seconds)
Green:	Normal supervisory operation.	10
Yellow:	Detector is in trouble and needs replacement.	5
Red:	Alarm condition.	2.5
No Flash:	Detector is not powered, or detector requires repair.	— —

**Notice:** This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

# Conventional Detection Devices

## Photo Thermal Smoke Detector Model OH121

### ARCHITECT AND ENGINEER SPECIFICATIONS

- State-of-the-art, smoke-detection chamber that yields quick response
- Incorporates one (1) state-of-the-art chamber for rapid, uniform response to alarm criteria (i.e. — heat, smoke)
- Magnet-test feature
- Automatic sensitivity test without the need for a special tester (per NFPA 72)
- Available optional relay base
- Available optional sounder base, providing an alert and evacuation signal
-  UL 268 Listed,  ULC S529 Listed; FM, CSFM Approved



### Product Overview

Model OH121 from Siemens Industry — Fire Safety is a photo / thermal smoke detector that contains a thermal sensor. When the sensor is utilized, an *Alarm* condition will trigger when the temperature reaches 135°F — at this point, the detector will also lock into *Alarm* condition.

The magnet-test feature allows for Model OH121 to be tested without the use of a heat gun, providing quick testing for installers and test personnel to prove the integrity of the wiring and proper connection to the fire alarm controlpanel (FACP).

The auto-sensitivity feature for Model OH121 stems from the internal, self-monitoring circuitry, and provides dynamic verification of sensitivity and / or required maintenance. The auto-sensitivity feature is displayed by Siemens unique (3) three-color LED provided locally on the detector — and optionally with the various remote LED indicators.

### Ratings

#### Environmental:

<b>Operating Temperature:</b>	32°F (0°C) — 100°F (38°C)
<b>Relative Humidity:</b>	Up to 95%, non condensing
<b>Air Pressure:</b>	No effect
<b>Thermal Alarm Temperature:</b>	135°F (57°C)
<b>Air Velocity:</b>	0 — 4000 feet / minute [for open-area protection and direct, in-duct application]

#### Electrical:

<b>Voltage:</b>	16 — 27 VDC
<b>Ripple:</b>	3V (peak to peak)
<b>Supervisory Current:</b>	100μA
<b>Alarm Current:</b>	25 — 50mA
<b>Start-Up Time:</b>	30 seconds, max.

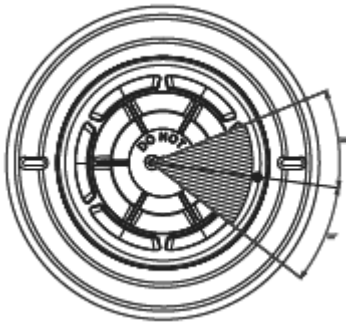
#### Detector Sensitivity:

<b>Sensitivity Range:</b>	1.71 — 2.8% / ft. (nominal 2.3% / ft.)
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## Mounting Diagram



**Model OH121**



**Model TM121**  
(Test-magnet placement)

## Details for Ordering

Model Number	Part Number	Description
OH121	S54372-F2-A1	Multi-Sensor Smoke Detector
OP121	S54372-F1-A1	Photoelectric Smoke Detector
HI121	S54372-F3-A1	Thermal Heat Detector
TM121	S54370-S12-A1	Test Magnet
DB-11	500-094151	Low-Profile Surface-Mount Base
DB-11E	500-094151E	Smaller-Diameter Detector Base
RLC-11	500-694625	Remote LED Ceiling Mount Detector, <b>red</b>
RLW-11	500-694626	Remote LED Wall Mount Detector, <b>red</b>
RR-11	500-694922	Relay Module
RSAC-11	500-694935	Remote, Multi-Color LED: Ceiling Mount
RS AW-11	500-695101	Remote, Multi-Color LED: Wall Mount

STI-9604	— —	STI Mechanical Protection Guard
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## LED Indicator Operation




Flash Color	Condition	Flash Interval (in seconds)
<b>Green:</b>	Normal supervisory operation.	10
<b>Yellow:</b>	Detector is in trouble and needs replacement.	5
<b>Red:</b>	Alarm condition.	2.5
<b>No Flash:</b>	Detector is not powered, or detector requires repair.	— —

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# Conventional Detection Devices

## Photoelectric Smoke Detector Model OP121

### ARCHITECT AND ENGINEER SPECIFICATIONS

- Magnet-test feature
- Incorporates one (1) state-of-the-art chamber for rapid, uniform response to alarm criteria (i.e. — smoke)
- Automatic sensitivity test without the need for a special tester (per NFPA 72)
- Available optional relay base
- Available optional sounder base, providing an alert and evacuation signal
-  UL 268 Listed [for open-area protection],  
 UL 268A Listed [for direct in-duct use],  
 ULC 529 Listed;  
FM, CSFM Approved



### Product Overview

Model OP121 from Siemens — Fire Safety is a photoelectric smoke detector with microprocessor-controlled, self-diagnostic circuitry, eliminating the need for burdensome sensitivity test equipment.

Model OP121 also comes with a new magnet-test feature. The magnet-test feature allows installers and test personnel to prove the integrity of the wiring and proper connection to the fire alarm control panel (FACP).

The auto-sensitivity feature for Model OP121 stems from the internal, self-monitoring circuitry, and provides dynamic verification of sensitivity and / or required maintenance. The auto-sensitivity feature is displayed by Siemens Fire Safety's unique (3) three-color light-emitting diode (LED), provided locally on the detector — and optionally with the various remote LED indicators.

### Ratings

#### Environmental:

<b>Operating Temperature:</b>	32°F (0°C) — 120°F (49°C)
<b>Humidity:</b>	Up to 95%, non condensing
<b>Air Pressure:</b>	No effect
<b>Air Velocity:</b>	0 — 4000 feet / minute [for open-area protection and direct, in-duct application]

#### Electrical:

<b>Voltage:</b>	16 — 27 VDC
<b>Ripple:</b>	3V (peak to peak)
<b>Supervisory Current:</b>	100µA
<b>Alarm Current:</b>	30 — 50mA
<b>Start-Up Time:</b>	30 seconds, max.

#### Detector Sensitivity:

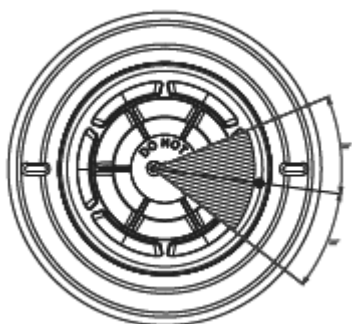
<b>Sensitivity Range:</b>	1.71 — 2.8% / ft. (nominal 2.3% / ft.)
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Photoelectric Smoke Detector **6193**

## Mounting Diagram



**Model OP121**



**Model TM121**  
(Test-magnet placement)

## Details for Ordering

Model Number	Part Number	Description
OP121	S54372-F1-A1	Photoelectric Smoke Detector
OH121	S54372-F2-A1	Photo Thermal Smoke Detector
HI121	S54372-F3-A1	Thermal Detector
TM121	S54370-S12-A1	Test Magnet
FDBZ492	S54319-B22-A1	Air-Duct Housing
FDBZ492-R	S54319-B24-A1	Air-Duct Housing with Relay
FDBZ492-PR	S54319-B25-A1	Self-Contained Air-Duct Housing with Power Supply and Relay
FDBZ-WP	S54319-B26-A1	Compatible Air-Duct Weatherproof Housing
FDBZ-RTL	S54319-B27-A1	Remote Test Lamp
DB-ADPT	500-094187	Adapter for Model PE-11 to Model DB-3 Base
DB-11	500-094151	Low-Profile Surface-Mount Base
DB-11E	500-094151E	Smaller-Diameter Detector Base
LK-11	500-695350	Model PE-11 Detector-Locking Kit
RLC-11	500-694625	Remote LED Ceiling Mount Detector, <b>Red</b>
RLW-11	500-694626	Remote LED Wall Mount Detector, <b>Red</b>
RR-11	500-694922	Relay Module
RSAC-11	500-694935	Remote, Multi-Color LED: Ceiling Mount
RSAW-11	500-695101	Remote, Multi-Color LED: Wall Mount
STI-9604	— —	STI Mechanical Protection Guard

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Flash Color	Condition	Flash Interval (in seconds)
<b>Green:</b>	Normal supervisory operation.	10
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