

# Conventional Detection Devices

## Photo Thermal Smoke Detector Model OH121

### Architect & 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 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 control panel (FACP).

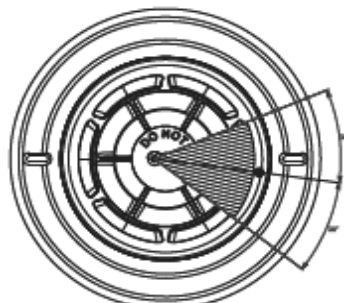
The auto-sensitivity feature for Model OH121 stems from the internal, self-monitoring circuitry, and provides dynamic verification of sensitivity and / or required maintenance. The auto-sensitivity feature is displayed by Siemens unique (3) three-color LED provided locally on the detector — and optionally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



Model OH121



Model OH121



Model TM121

Test Magnet Placement



### Environmental Ratings

<b>OPERATING TEMPERATURE:</b>	32°F (0°C) — 100°F (38°C)
<b>HUMIDITY:</b>	0 – 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 Ratings

<b>VOLTAGE:</b>	16VDC – 27VDC
<b>RIPPLE:</b>	3V (peak to peak)
<b>SUPERVISORY CURRENT:</b>	100µA
<b>ALARM CURRENT:</b>	50mA
<b>START-UP TIME:</b>	30 seconds, max.

### Detector Sensitivity

<b>SENSITIVITY RANGE:</b>	1.71 — 2.8% / ft. (nominal 2.3% / ft.)
---------------------------	---

### Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
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, red
RLW-11	500-694626	Remote LED Wall Mount Detector, red
RSAC-11	500-694935	Remote, Multi-Color LED: Ceiling Mount
RSAW-11	500-695101	Remote, Multi-Color LED: Wall Mount

See: [www.STI-USA.com](http://www.STI-USA.com) for further details on ordering Model STI-9604

#### In Canada order:

MODEL OR TYPE	PART NUMBER	PRODUCT
DB-11C	500-095687	Detector Mounting Base, ULC Listed

### 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.	--

This Page Left Intentionally Blank

**NOTICE** – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

**SIEMENS**

**Siemens Industry, Inc.**

Smart Infrastructure - Building Products  
2 Gatehall Drive • Parsippany, NJ 07054  
Tel: (973) 593-2600

March - 2023  
(Rev 4)