

SIEMENS**Data Sheet**



Fire Safety & Security Products

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 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.

Ratings

Environmental:

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

Electrical:

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

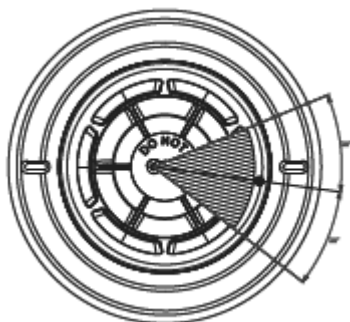
Detector Sensitivity:

| | |
|---------------------------|---|
| Sensitivity Range: | 1.71 – 2.8% / ft. (nominal 2.3% / ft.) |
|---------------------------|---|

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, 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 |
| RSAW-11 | 500-695101 | Remote, Multi-Color LED: Wall Mount |
| STI-9604 | -- | STI Mechanical Protection Guard |

See: 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.