




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:

Operating Temperature:	32°F (0°C) – 120°F (49°C)
Humidity:	Up to 95%, non condensing
Air Pressure:	No effect
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:	30 – 50mA
Start-Up Time:	30 seconds, max.

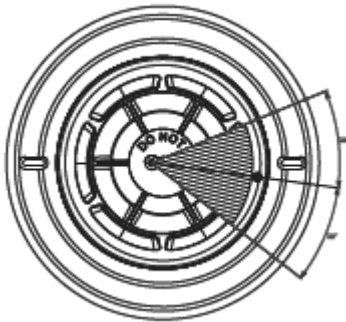
Detector Sensitivity:

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