

SpaceLogic Sensors

SPMDP & SPMOP Particulate Matter Sensors



Product Description

The SpaceLogic SPMDP and SPMOP Particulate Matter (PM) Sensors represent a technological breakthrough in optical PM sensors. This laser-scatter type sensor detects and counts particles using light scattering principles and features innovative contamination resistance technology to perform highly accurate and reliable PM measurements. These sensors are designed for use in duct mount (SPMDP) or outdoor (SPMDO) applications.

Over a ten-year lifetime, these sensors provide superior precision measurement of numerous PM types and higher-resolution particle size binning, allowing for the detection of many types of environmental dust and other particles.

The detection concentration range is 0 to 1,000 µg/m³

These versatile sensors offer selectable PM measurement options of PM1.0, PM2.5, PM4.0 and PM10.

Features

- Laser-scatter type sensor featuring innovative contamination resistance technology for highly accurate measurement of particulate matter
- Easy to install and commission:
 - Latch-on sensor cover
 - Screwless terminal block wiring with spring actuator
 - Analog DIP switch selectable output: 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc
- Unique long-term stability
- Advanced particle size binning
- Precise mass concentration sensing
- Multiple PM measurement options
- Key component for the LEED green building program and WELL Building Standard*

Available Products

	Installation	Output
SPM	□	P
	O = Outdoor wall mount D = Duct mount	P = PM1.0/2.5/4.0/10 selectable

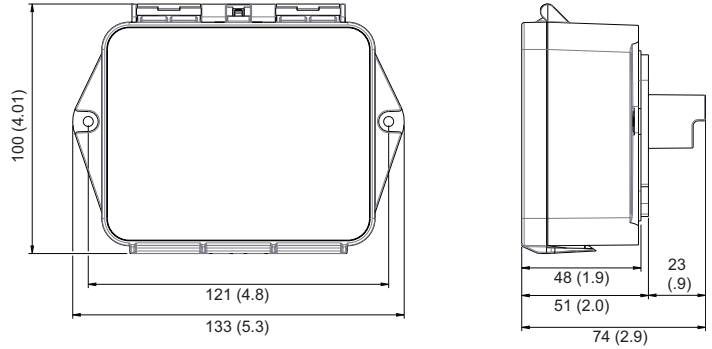
*Leadership in Energy and Environmental Design (LEED) is a registered trademark of the US Green Building Council. The WELL Building Standard is a trademark of the International WELL Building Institute in the United States and other countries.

Specifications

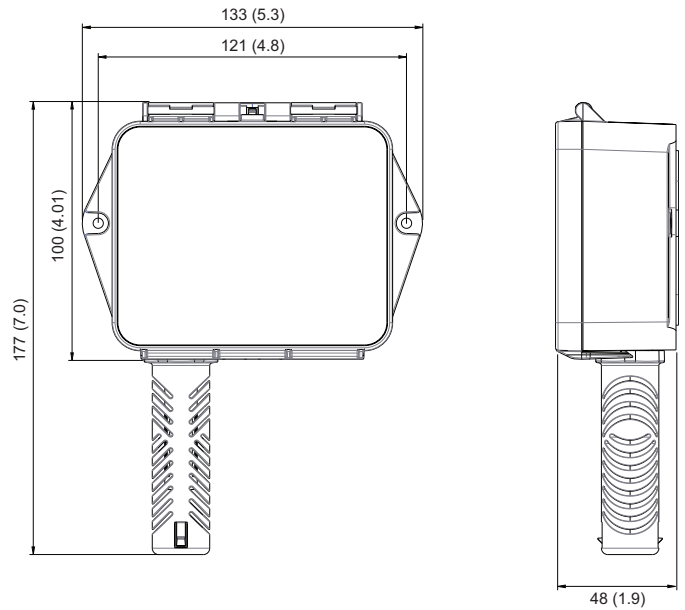
Operating and Storage Environment	
Operating temp. range	-10 to 60 °C (14 to 140 °F)
Operating humidity range	0 to 95% RH (non-condensing)
Storage temp. range	-40 to 60 °C (-40 to 140 °F)
Storage humidity range	0 to 95% RH (non-condensing)
Power supply	3-wire volt mode: 20 to 30 Vdc, 24 Vac, 50 to 60 Hz
Output	Selectable 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc
Power consumption	3.7 VA
Housing material	Polycarbonate; flammability rating UL 94 V0
Mounting location	SPMDP: For indoor use only. Not suitable for wet locations. SPMOP: For outdoor use.
IP rating	IP65
Protection class	Class III
PM Sensor	
Sensor type	Laser-scatter
Particulate size	PM1.0, PM2.5, PM4.0, PM10
Resolution	± 1 µg/m³
Mass concentration output range	0 to 1000 µg/m³
Accuracy*	PM1.0 and PM2.5: ±5 µg/m³ (+5% measured value), ±10% (100 to 1000 µg/m³) PM4.0 and PM10**: ±25 µg/m³ (0 to 100 µg/m³), ±25% (100 to 1000 µg/m³)
Wiring	
Wiring	Screwless terminal block with spring actuator, 16-24 AWG
Warranty	
Limited warranty	2 years
Regulatory Information	
Agency approvals	UL 916 European conformance CE: EN61000-6-2, EN61000-6-3, EN61000 Series immunity, EN 61326-1 FCC Part 15 Class A Green Premium (REACH, RoHS), RoHS 2 (China), RCM (Australia), ICES-001 (Canada), UKCA (UK)

*Sensor-to-sensor variation.
** PM4.0 and PM10 output values are calculated based on distribution profile of all measured particles.

Dimensions mm (in.)
Duct Mount



Outdoor Mount



USA: +1 888-444-1311
Europe: +46 10 478 2000
Asia: +65 6484 7877
www.schneider-electric.com

Life Is On

