

# SpaceLogic Sensors

## SLP Series PM Sensors – BACnet and Modbus



Note: A subset of models shown.

### Product Description

The SpaceLogic SLP PM (Particulate Matter) Series of air quality sensors for living space is a flexible multisensor platform for use with BAS controllers designed to accept BACnet or Modbus outputs. Housings are available in Medium matte white and Optimum faces available in black and white. All housing types are available with touchscreen and blank user interface options. The SLP PM Series offers an all-in-one sensor with temp, RH, CO<sub>2</sub>, VOC, PM1, PM2.5, PM4 and PM10.

### Features

- Medium matte white housing or optimum glass panel housing available in white or black
- Laser-scatter type PM sensor featuring innovative contamination resistance technology for highly accurate measurement of particulate matter
- Manual and auto field calibratable non-dispersive infrared CO<sub>2</sub> sensor
- VOC sensor available
- Quick to commission with DIP switch selectable outputs
  - BACnet, Modbus via RS-485
- Selectable BACnet MSTP and Modbus outputs via RS-485
- Temperature output value shown as default main value on touchscreen displays
- 61 mm (2.4") backlit color touchscreen
  - Dedicated screen for all PM values
  - Digital temperature indication (0.1° display resolution of °F or °C)
  - Digital humidity indication (0.1% RH display resolution)
  - Digital CO<sub>2</sub> indication (1 ppm display resolution)
  - Stoptlight feature for visual indication at user-configurable CO<sub>2</sub> and PM threshold levels (touchscreen models only)
  - Selectable temp, RH and fan speed setpoint
  - Configurable screen lock and display timeout
  - Override
- 18-24 AWG screw terminals

### Available Products

Model Number	Description	User Interface	Housing Finish
SLPSTCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, Touch, BAC/MB	Touchscreen	Medium White
SLPBTCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, Touch, BAC/MB, Optm Bk	Touchscreen	Optimum Black
SLPWTCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, Touch, BAC/MB, Optm Wh	Touchscreen	Optimum White
SLPSXCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, BAC/MB	Blank	Medium White
SLPBXCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, BAC/MB, Optm Bk	Blank	Optimum Black
SLPWXCVP2	Sensor, PM, CO <sub>2</sub> , VOC, RH, Temp, BAC/MB, Optm Wh	Blank	Optimum White

### Replaceable PM Elements

Model Number	Description
SLXPMS	Replaceable Module, PM

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 Europe: +46 10 478 2000  
 Asia: +65 6484 7877  
[www.schneider-electric.com](http://www.schneider-electric.com)

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## Specifications

Operating Environment			
Input power	Class 2; 20 to 30 Vdc, 24 Vac, 50 to 60 Hz		
Protocol output	BACnet or Modbus via RS-485, selectable		
Operating temp. range	0 to 50 °C (32 to 122 °F)		
Operating humidity range	0 to 95% RH non-condensing		
Housing material	High impact ABS plastic		
IP rating	IP 30		
Mounting location	For indoor use only. Not suitable for wet locations.		
Surface mount	The device can be surface mounted on Single Gang J-Box, British Standard and CE60 wall boxes		
PM Sensor			
Range	0 to 1,000 µg/m <sup>3</sup>		
Accuracy	PM1 and PM2.5: 0 to 100 µg/m <sup>3</sup> +/-[5µg/m <sup>3</sup> +5% m.v.], 100 to 1000 µg/m <sup>3</sup> +/-[10% m.v.] PM4 and PM10 <sup>1</sup> : 0 to 100 µg/m <sup>3</sup> +/-[25µg/m <sup>3</sup> ], 100 to 1,000 µg/m <sup>3</sup> +/-[25% m.v.] (sensor-to-sensor deviation)		
CO <sub>2</sub> Sensor			
Sensor type	Non-dispersive infrared (NDIR), diffusion sampling		
Output range	0 to 10,000 ppm		
Accuracy	±30 ppm ±3% of measured value		
Repeatability	±20 ppm ±1% of measured value		
Response time	<60 seconds for 90% step change		
VOC Sensor			
Sensor type	Solid state		
Output range	0 to 100% AQI for VOC		
Accuracy	±15% of measured value		
Output scale	0 to 1,000 ppb of total VOC (TVOC)		
AQI table <sup>2</sup>	<b>Level</b>	<b>Ventilation Recommendation</b>	<b>TVOC (ppb)</b>
	>61%	Greatly increased	>610
	20 to 61%	Significantly increased	200 to 610
	10 to 20%	Slightly increased	100 to 200
	5 to 10%	Average	50 to 100
	0 to 5%	Target value	0 to 50
RH Sensor			
Sensor type	Solid state capacitive, replaceable		
Accuracy (includes Hysteresis) <sup>3</sup>	±3.8% RH from 10 to 60% RH @ 25°C (77 °F) ±4.8% RH from 60 to 80% RH @ 25°C (77 °F) ±5.8% RH from 80 to 100% RH @ 25°C (77 °F)		
Linearity	Included in accuracy specification		
Stability	±1% @ 20°C (68 °F) annually for 2 years		
Output range	0 to 100% RH		

Temperature coefficient	±0.1% RH/°C above or below 25 °C (77 °F) typical
Temperature Sensor	
Sensor type	Solid state, integrated circuit
Accuracy	±0.2 °C (±0.4 °F) typical
Resolution	0.1 °C (0.1 °F)
Range	0 to 50 °C (32 to 122 °F)
Display Models	
Touchscreen	61 mm (2.4 in), color, backlit, capacitive, 240x300px Setpoint: Temperature, humidity or fan speed selectable Timeout override: Display timeout Lockout override: Touchscreen/button lockout
Setpoints <sup>4</sup>	
Temperature setpoint	Scale: 0 to 50 °C (32 to 122 °F) max., adjustable span
Humidity setpoint	Scale: 0 to 100% RH
Fan speed setpoint	Off, Low, Medium, High, Auto
Override	
Override button	Display models feature momentary override button
Wiring	
Terminal blocks	Screw terminals, 18-24 AWG
Screw terminal torque	0.2 N-m (2.0 in-lbF) max.
EBO integration <sup>5</sup>	Download Modbus Device Type template for Modbus models from the Building Application tool.
Warranty	
Limited warranty	5 years
Regulatory Information	
Agency approvals	UL 916 European conformance CE: EN 60730-1, EN 60730-2-9, EN 60730-2-13, EN 61000-6-2, EN 61000-6-3, EN 61000 Series - Industrial Immunity, EN 61326-1 FCC Part 15 Class B, REACH, RoHS, Green Premium, RCM (Australia), ICES-003 (Canada), UKCA (UK)

- PM4 and PM10 output values are calculated based on distribution profile of all measured particles.
- Air Quality Index for VOC aligns with TVOC levels for IAQ as specified by the WHO (World Health Organization).
- Humidity sensor overall accuracy should include: accuracy, temperature coefficient and stability. Humidity accuracy is shown as an absolute value, so if testing accuracy with a hand-held device, you must check for deviation in its readings instead of calculating the percentual deviation. Additionally, you must consider the overall accuracy of the hand-held device in the comparison.
- On display models only.
- See <http://bms-applications.schneider-electric.com/type/MB/download/419> for device import file and instructions.

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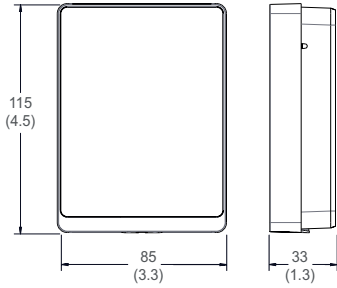
### Power Table

Model	Description	Max. VA
SLPxTCPV2	Touch CO2/VOC/Temperature/Humidity/PM	2.520
SLPxxCPV2	Blank CO2/VOC/Temperature/Humidity/PM	2.016

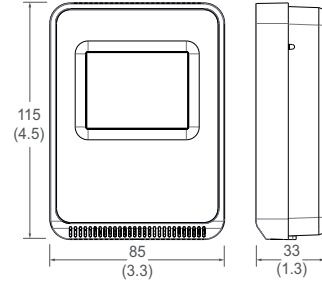
Note: Model numbers based on supported product matrix.

### Dimensions mm (in.)

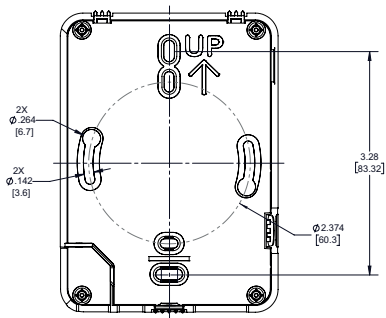
#### Optimum Housing



#### Medium Housing



### Base Hole Measurement



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