

# SpaceLogic Room Units Air Quality Sensors – Analog



Note: A subset of models shown.

## Product Description

The SpaceLogic SLA Series of air quality sensors for living space is a flexible multisensor platform for use with BAS controllers designed to accept 4 to 20mA, 0 to 5Vdc or 0 to 10Vdc outputs. Housings are available in Medium matte white and Optimum faces available in black and white. All housing types are available with three user interface options: touchscreen, LCD with three buttons and blank. CO<sub>2</sub> and temperature sensors are included with all SLA Series air quality sensors. Models with VOC sensors and relative humidity sensors are also available.

## Features

- Medium matte white housing or optimum glass panel housing available in white or black
- Field calibratable non-dispersive infrared CO<sub>2</sub> sensor
- Replaceable RH element available in 1% & 2% with NIST certificate
- VOC sensor available
- Temperature output on all models
- 61 mm (2.4") backlit color touchscreen and LCD, three button display options available
  - 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 (0 to 2000 ppm display resolution)
  - Selectable temp, RH and fan speed setpoint (0-10V)
  - Configurable screen/button lock and display timeout
  - Override
- Selectable 4 to 20mA, 0 to 5V and 0 to 10V analog outputs
- 18-24 AWG screw terminals

## Available Products Matrix

SLA	Housing	User Interface	CO <sub>2</sub> Sensor	RH Sensor*	Example:
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SLA <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	S = Medium white matte housing W = Optimum white housing B = Optimum black housing	T = Color touchscreen L = 3-button LCD display X = None	C = NDIR CO <sub>2</sub> CV = NDIR CO <sub>2</sub> / VOC	2 = 2% X = None	

\* RH elements are replaceable.

## Replaceable RH Elements

Model	RH Accuracy	Calibration Certificate	Description
SLXRHS1N	±1%	X	Replaceable RH Sensor, 1% w/NIST Cert
SLXRHS2N	±2%	X	Replaceable RH Sensor, 2% w/NIST Cert
SLXRHS2X	±2%		Replaceable RH Sensor, 2%

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www.schneider-electric.com

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**Operating Environment**

Input power	Class 2; 20 to 30 Vdc, 24 Vac, 50 to 60 Hz
Analog output	Selectable 4 to 20 mA, 0 to 5 V, 0 to 10 V
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

**CO<sub>2</sub> Sensor**

Sensor type	Non-dispersive infrared (NDIR), diffusion sampling
Output range	0 to 2000/5000 ppm (selectable)
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)

	Level	Ventilation Recommendation	TVOC (ppb)
AQI table*	>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**

HS sensor	Thin-film capacitive, replaceable
Accuracy	±2% from 10 to 80% RH @ 25°C (77 °F)
Hysteresis	1.5% typical
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: 0-10Vdc. Temperature, humidity or fan speed selectable Timeout override: Display timeout** Lockout override: Touchscreen/button lockout**
LCD	52mm (2.05 in), segmented with 3 buttons Setpoint: 0-10Vdc. Temperature, humidity or fan speed selectable Timeout override: Display timeout** Lockout override: Touchscreen/button lockout**

**Setpoints\*\*\***

Temperature setpoint	0 to 10V output Scale: 10 to 35 °C (50 to 95 °F) / 0 to 50 °C (32 to 122 °F)
Humidity setpoint	0 to 10V output Scale: 0 to 100% RH
Fan speed setpoint	0 to 10V output Off 0V, Low 3.3V, Med. 6.7V, High 10.0V

**Wiring Terminals**

Terminal blocks	Screw terminals, 18-24 AWG
Screw terminal torque	0.2 N-m (2.0 in-lbF) max.

**Regulatory Information**

Agency approvals	UL 916, European conformance CE: EN61000-6-2 EN61000-6-3 EN61000 Series - industrial immunity EN 61326-1 FCC Part 15 Class B, REACH, RoHS, Green Premium, RCM (Australia), ICES-003 (Canada)
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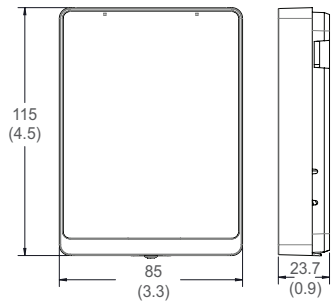
\* Air Quality Index for VOC aligns with TVOC levels for IAQ as specified by the WHO (World Health Organization).

\*\* DIP switch selectable.

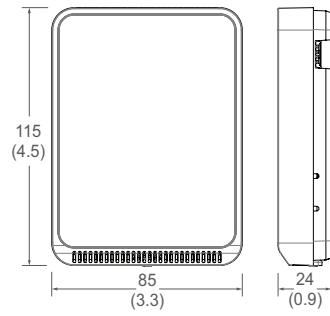
\*\*\* One setpoint type is selectable via DIP switch on display models only.

### Dimensions mm (in.)

#### Optimum Housing



#### Medium Housing



### Housing Finishes



Optimum White



Optimum Black



Medium White

### User Interface Types



Touchscreen



LCD with Buttons



Blank