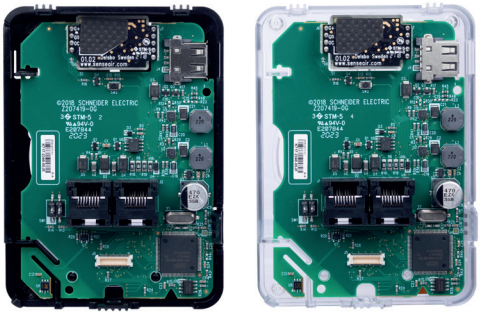
SpaceLogic Sensors
SXWS Sensor Base



Product Description

SXWS sensors are a family of living space sensors for use with MP and RP Series controllers that use the EcoStruxure Building Operation software user interface. These sensors use an RJ-45 Sensor Bus that provides communication and power from the controller.

SXWS living space sensors are modular and are ordered in two parts: the sensor base and the cover. Four SXWS communicating sensor base models are available that can be paired with any SXWS cover model. Carbon Dioxide (CO_2), Relative Humidity, and Temperature sensor base options provide an efficient, cost-effective solution for living space air quality and comfort needs.

Features

- Works with SXWS medium matte white housings or optimum glass panel housings available in white or black
- 61 mm (2.4”) backlit color touchscreen cover available
- Digital temperature indication (°F or °C)
- Digital humidity indication (% RH)
- Long-life humidity sensing element with excellent resistance to contamination and condensation
- Digital CO_2 indication (0-2000 ppm display resolution)
- Field calibratable non-dispersive infrared CO_2 sensor
- Pushbutton override capability allows occupants to switch to timed occupied mode for after hours operation
- Displays selected system values such as setpoints, outdoor air temperature, and operating mode
- Provides the ability to change operating modes
- Passive Infrared (PIR) occupancy sensor covers available
- Directly connects to the sensor bus of the MP and RP Series controllers with EcoStruxure Building Operation software version 2.0 or greater
- Sensor Bus provides power and communication via RJ-45 over Cat-5/6 cable (22 to 26 AWG)

Applicable Documentation

Document Title	Description
SXWS Living Space Sensor Blank Cover	Installation instructions for blank cover without occupancy sensor
SXWS Living Space Sensor Button and Occupancy Covers	Installation instructions for 3-button covers with and without occupancy sensors and blank cover with occupancy sensor
SXWS Living Space Sensor Touchscreen Cover	Installation instructions for touchscreen models with and without occupancy sensors
SXWS Living Space LCD Temperature Sensor	LCD temperature sensor base and cover installation instructions
SXWS Living Space Resistive Temperature Sensor	Non-communicating temperature sensor installation instructions

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

Available Products

SXWS Sensor Bases

Model Number	Description	Temp	RH	CO_2	Cover	IP Controller System Bus (Communicating)	Base Color
SXWSBTXXXSXX*	Sensor Base, Temperature	X			Not Included	X	Clear/Transparent
SXWSBTHXXSXX*	Sensor Base, Temperature, Humidity	X	X		Not Included	X	Clear/Transparent
SXWSBTXCXSXX*	Sensor Base, Temperature, CO_2	X		X	Not Included	X	Clear/Transparent
SXWSBTXCXSXB*	Sensor Base, Temperature, CO_2	X		X	Not Included	X	Black
SXWSBTHCXSXX*	Sensor Base, Temperature, Humidity, CO_2	X	X	X	Not Included	X	Clear/Transparent

SXWS Covers for Use with Sensor Bases**

Model Number	61mm (2.4”) Color Touchscreen with Light & Blind Control	Override	Setpoint	Off-Touchscreen Light & Blind Control Buttons	Off-Touchscreen Light Control Buttons	Occupancy Sensor (PIR)	Housing Finish
SXWSCDXSELXX	X	X	X				Medium, White
SXWSC3XSELXX		X	X				Medium, White
SXWSCBXSELXX							Medium, White
SXWSCDPSELXX	X	X	X			X	Medium, White
SXWSC3PSELXX		X	X			X	Medium, White
SXWSCBPSELXX						X	Medium, White
SXWSCDXSELXW	X	X	X				Optimum, White
SXWSC3XSELXW		X	X				Optimum, White
SXWSCBXSELXW							Optimum, White
SXWSCDPSELXW	X	X	X			X	Optimum, White
SXWSC3PSELXW		X	X			X	Optimum, White
SXWSCBPSELXW						X	Optimum, White
SXWSCDXSELXB	X	X	X				Optimum, Black
SXWSC3XSELXB		X	X				Optimum, Black
SXWSCBXSELXB							Optimum, Black
SXWSCDPSELXB	X	X	X			X	Optimum, Black
SXWSC3PSELXB		X	X			X	Optimum, Black
SXWSCBPSELXB						X	Optimum, Black
SXWSC2XSELXW	X	X	X		X		Optimum, White
SXWSC4XSELXW	X	X	X	X			Optimum, White
SXWSC2PSELXW	X	X	X		X	X	Optimum, White
SXWSC4PSELXW	X	X	X	X		X	Optimum, White
SXWSC2XSELXB	X	X	X		X		Optimum, Black
SXWSC4XSELXB	X	X	X	X			Optimum, Black
SXWSC2PSELXB	X	X	X		X	X	Optimum, Black
SXWSC4PSELXB	X	X	X	X		X	Optimum, Black

* Covered by these installation instructions.
** SXWS covers will not work with combination base/cover sensors.

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

Specifications

CO_2 Sensor	
Sensor type	Non-dispersive infrared (NDIR), diffusion sampling
Output range	0 to 10,000 ppm
Accuracy	±30 ppm ±2% of measured value for 0 to 2,000 ppm range
Repeatability	±20 ppm ±1% of measured value
Response time	<60 seconds for 90% step change
RH Sensor	
HS sensor	Solid state capacitive
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	
Accuracy	±0.2 °C (±0.36 °F) typical
Operating Environment	
Operating temperature	0 to 50 °C (32 to 122 °F)
Operating humidity range	0 to 95% RH, non-condensing
Housing material	High impact ABS plastic Flammability rating UL 94 V-0
Mounting location	Not suitable for wet locations. For indoor use only.
Input power	2 or 3 watts (depending on controller model), 24 Vdc over sensor bus
Wiring	
Communicating models	RJ-45 female Sensor Bus
Regulatory Information	
Agency approvals	UL 916 European conformance CE: EN 61000-6-3 EN 61326-1 EN 61000 Series - industrial immunity standard FCC Part 15 Class B, REACH, RoHS, Green Premium, RCM (Australia), ICES-003 (Canada)

* Humidity sensor measurement uncertainty should include: accuracy, hysteresis, temperature coefficient and stability.

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

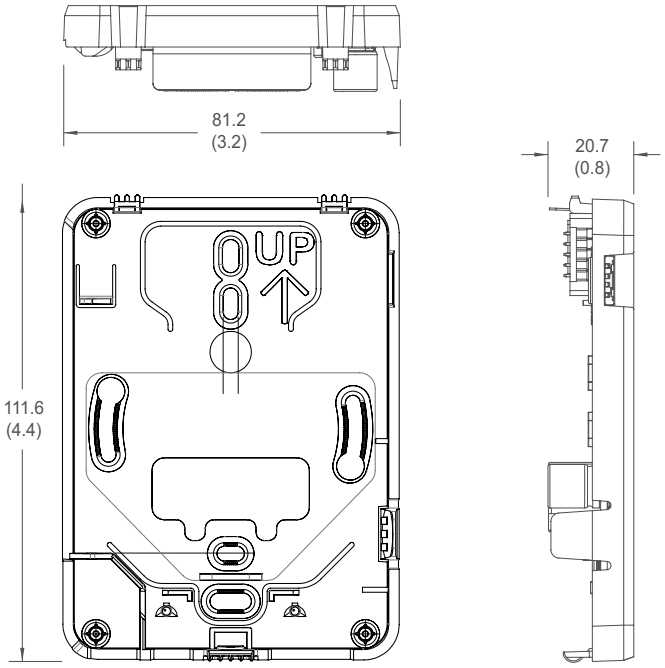
Precautions

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing the product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

If this product is used in a manner not specified by the manufacturer, the protection provided by the product may be impaired. No responsibility is assumed by the manufacturer for any consequences arising out of the use of this material.

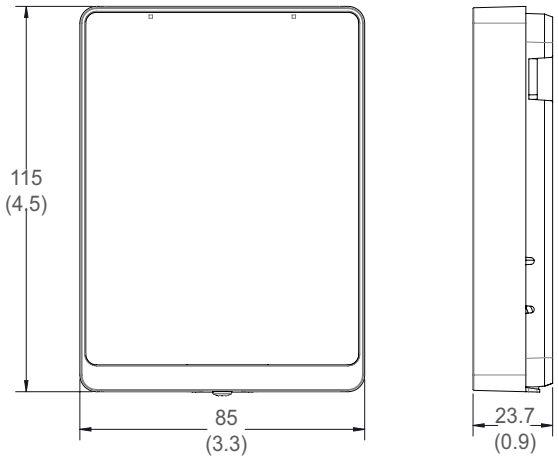
Dimensions mm (in.)

SXWS Sensor Base

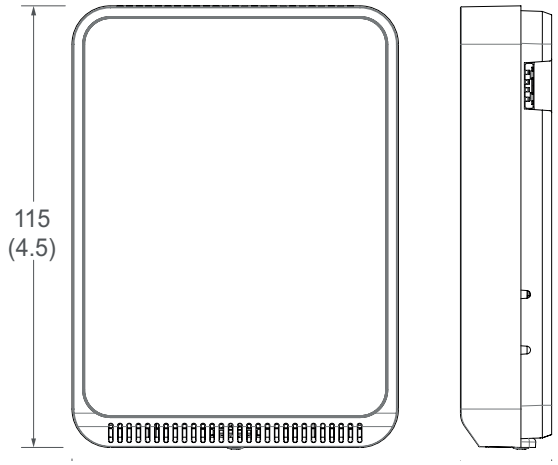


SXWS Base with Cover Installed

Optimum Housing



Medium Housing



Functions

Sensor bases provide output data to the EcoStruxure Building Operation controller via the Sensor Bus. Specific user interface functionality is determined by the cover model used with the sensor base. See cover installation instructions for user interface functionality.

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

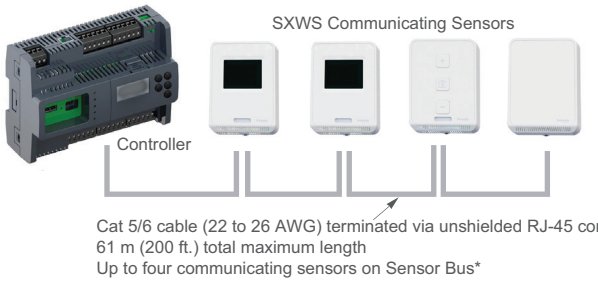
Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

System Architecture

MP or RP Series Controller and Sensor Bus with Communicating Sensors



Cable Termination

The IP Controller Sensor Bus allows up to four communicating SXWS living space sensors to be connected to a single MP or RP Series controller.* Total maximum cable length cannot exceed 61 m (200 ft.). Cat 5/6 cable (22 to 26 AWG) terminated with unshielded RJ-45 connectors are used for power and communication. Cables must be the “straight through” type, rather than crossover versions. Cross-over RJ-45 cables will not work.

NOTICE

MISWIRE POTENTIAL

- Do not connect Sensor Bus cables to any non-Sensor Bus connections, including Ethernet.

Failure to follow these instructions can result in damaged circuitry and loss of factory warranty.

NOTICE

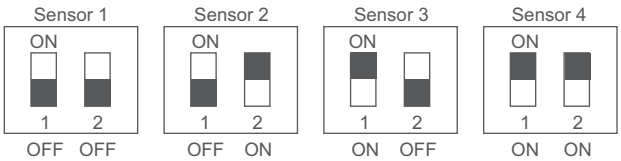
ELECTRICAL DAMAGE

- Do not use a CAT 5/6 cable terminated with a shielded RJ-45 connector.

Failure to follow these instructions can result in damaged circuitry and loss of factory warranty.

DIP Switch Addressing

Up to four SXWS Communicating Sensors can be connected to the Sensor Bus*. These sensors must be uniquely addressed using the DIP switches. The default DIP switch setting for the SXWS Communicating Sensor is sensor position 1. If more than one sensor is connected to the Sensor Bus, the DIP switch settings for the additional sensors will need to be changed.



Note: Black squares indicate DIP switch positions.

*Due to power constraints there are some limitations on the number of sensors the Sensor Bus can support. For specific combinations of sensors, see the Sensor Bus Configuration Calculator on the last page of this document.

SXWS Base Installation

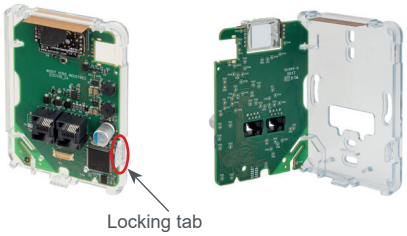
NOTICE

PRODUCT DAMAGE

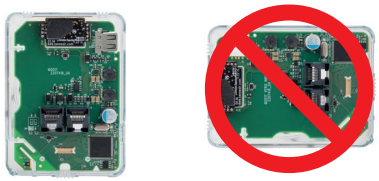
- No unnecessary pressure should be applied when placing the cover on the base.
- If force seems necessary, remove the cover and try again, ensuring the base connectors and the cover are perfectly aligned.

Failure to follow these instructions can result in connector damage and affect display performance.

1. Using the locking tab, swing the circuit board open to expose mounting screw holes on the back of the housing.



2. Position the sensor vertically on the wall 1.35 m (4.5 ft.) above the floor with the “UP” arrow facing upward. Locate away from windows, vents and other sources of draft. If possible, do not mount on an external wall, as this may cause inaccurate temperature readings.



3. Pull RJ-45 cable(s) through the hole in the backplate.



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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

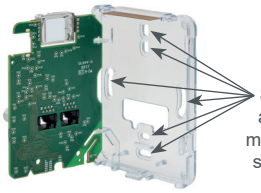
4. Mount the backplate onto the wall using the screws provided.

NOTICE

MISCONNECTION POTENTIAL

- To power the sensor and cover correctly, mount base on a flat and distortionless wall.
- Do not over-tighten screws, as it may cause torsion of the base.

Failure to follow these instructions can result in connectivity issues between the base and cover.



5. Plug RJ-45 cables into the receptacles on the circuit board. Either receptacle may be used for connection to the MP or RP Series controller or to another SXWS communicating sensor.



6. Swing the circuit board closed, ensuring the RJ-45 cables are tucked sufficiently into the wall opening to allow for complete closure using the locking tab.

NOTICE

PRODUCT DAMAGE

- Push the circuit board fully into the housing, beyond the locking tab. Circuit board must lie flat within the housing.

Failure to follow these instructions can result in damaged connector pins and a non-functioning screen or cover.



7. Install the desired cover and ensure the male connector is well aligned with the female connector before installation.

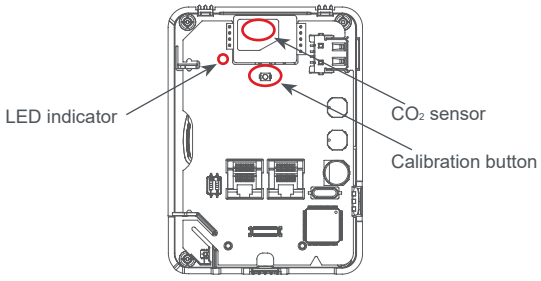


CO_2 Sensor Calibration

There are three methods for CO_2 calibration available on SXWS sensors: 400 ppm baseline calibration, nitrogen gas calibration, and automatic baseline calibration (ABC).

400 ppm Baseline Calibration

400 ppm baseline calibration allows the sensor to be set at 400 ppm, which is the CO_2 level typically found in an outdoor environment (local variations may be higher or lower). Press and hold the calibration button. The LED will turn off*. After holding down the calibration button for two seconds, the LED will flash once. Release the button and the 400 ppm calibration process begins. The LED flashes slowly to indicate calibration is in progress. If calibration completes successfully the LED flashes three times rapidly. Do not breathe on the sensor.
If the calibration has failed the LED turns off for three seconds and the process will need to be repeated. After a successful or failed calibration the unit returns to normal operation mode and the LED becomes illuminated indicating the unit has power.



*Note that the CO_2 sensor has an optical bench that flashes. This is not the LED. The LED is at position D6 on the board. See diagram above.

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

Life Is On Schneider Electric

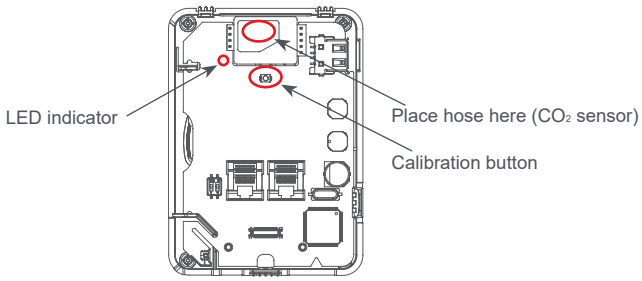
© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

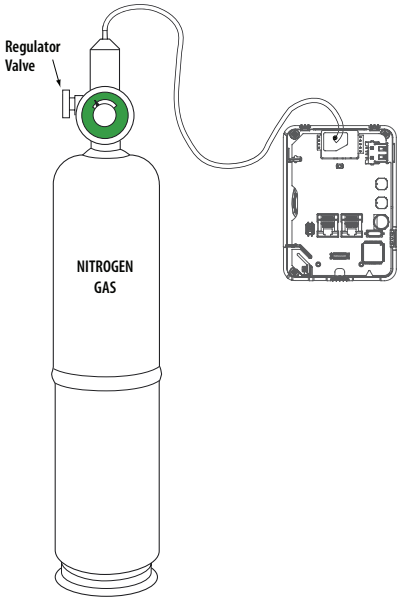
Nitrogen Gas Calibration

The nitrogen gas calibration method uses nitrogen gas (0 ppm CO_2) to zero the sensor.

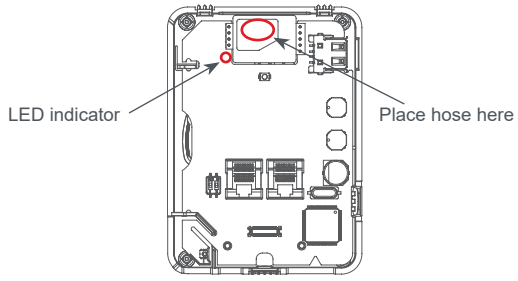
1. Place and hold the gas cylinder hose where gas will flow into the filter on the sensing module. See diagram below.



2. Start flowing nitrogen gas (0 ppm CO_2). Use a flow rate of 0.3 to 0.5 liters/minute.



Press and hold down the calibration button. The LED* will turn off. Hold for five seconds. After holding down the calibration button for two seconds the LED will flash once. Continue to hold. After holding down the calibration button for 5 seconds the LED will flash twice. Release button and the 0 ppm calibration process begins. The LED flashes slowly to indicate calibration is in progress.



*Note that the CO_2 sensor has an optical bench that flashes. This is not the LED. The LED is at position D6 on the board. See diagram above.

3. If calibration completes successfully, the LED flashes rapidly three times. If the calibration has failed, the LED turns off for three seconds to indicate a failure and the process will need to be repeated. After a successful or failed calibration the unit returns to normal operation mode and the LED becomes illuminated indicating the unit has power.
4. Once calibration is complete, remove the hose.

Automatic Baseline Calibration

This mode can only be initiated by the MP-X controller. The ABC mode addresses the 400 ppm calibration. It allows turning on or off a background correction/recovery mode that will minimize any calibration error that has been caused by shock during handling and transportation or is caused by a long term shift in measurement. The ABC algorithm constantly keeps track of the sensor's lowest reading over a preconfigured time interval and slowly corrects for any long-term drift detected as compared to the expected fresh air value of 400 ppm. Its time duration is determined by a command sent to the sensor from the MP-X controller. After initial startup, it is expected that the sensor reaches specified accuracy after three days.

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

Sensor Bus Configuration Calculator

Calculate Power/mW to Validate Sensor Bus Configuration

Add power/mW for all covers, combination units and bases to be used on a single sensor bus for total sensor bus wattage. The sensor bus will support current of up to 3000 mW*. Device combinations totalling more than 3000 mW* will not be supported on the sensor bus.

*Some older controller versions support up to 2000 mW. Please check the controller specification sheet for further information.

Sensor Bus Power Table

Description	Model Number	Power/mW
Sensor Base, Temp	SXWSBTXXXSXX	90
Sensor Base, Temp, Humidity	SXWSBTHXXSXX	90
Sensor Base, Temp, CO_2	SXWSBTXCXSXX	490
	SXWSBTXCXSXB	490
Sensor Base, Temp, Humidity, CO_2	SXWSBTHCXSXX	490
Resistive 10K T3 Combination Sensors	SXWSATXXXRXX	0
	SXWSATXXXRXB	0
	SXWSATXXXRXW	0
Temp with LCD, 3 Button Combination Sensors	SXWSATXXXSLX	80
	SXWSATXXXSLB	80
	SXWSATXXXSLW	80
3 Button Covers with Occupancy	SXWSC3PSELXB	210
	SXWSC3PSELXW	210
	SXWSC3PSELXX	210
3 Button Covers	SXWSC3XSELXB	190
	SXWSC3XSELXW	190
	SXWSC3XSELXX	190
Blank Covers with Occupancy	SXWSCBPSELXB	20
	SXWSCBPSELXW	20
	SXWSCBPSELXX	20
Blank Covers	SXWSCBXSELXB	0
	SXWSCBXSELXW	0
	SXWSCBXSELXX	0
Touchscreen Covers with Occupancy	SXWSCDPSELXB	210
	SXWSCDPSELXW	210
	SXWSCDPSELXX	210
	SXWSC2PSELXB	210
	SXWSC2PSELXW	210
	SXWSC4PSELXB	210
	SXWSC4PSELXW	210

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA

January 2026
Z207549-0N nk

Sensor Bus Power Table (cont.)

Description	Model Number	Power/mW
Touchscreen Covers	SXWSC2XSELXB	190
	SXWSC2XSELXW	190
	SXWSC4XSELXB	190
	SXWSC4XSELXW	190
	SXWSCDXSELXB	190
	SXWSCDXSELXW	190
	SXWSCDXSELXX	190
eCommission Bluetooth Adaptor	SXWBTAECXX10001*	300

*The eCommission Bluetooth Adapter is used temporarily for commissioning and servicing only.

China RoHS Compliance Information
Environment-Friendly Use Period (EFUP) Table

部件名称	有害物质 - Hazardous Substances					
Part Name	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电子件 Electronic	X	O	O	O	O	O

本表格依据SJ/T11364的规定编制。
O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。
（企业可在此处，根据实际情况对上表中打 "X" 的技术原因进行进一步说明。）

This table is made according to SJ/T 11364.
O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.
X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572

Z000057-0B

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

Life Is On Schneider Electric

© 2026 Schneider Electric. All rights reserved. All trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.
Schneider Electric · 800 Federal Street, Andover, MA 01810 USA