



Specification Sheet

SC100B/02 SR Transceiver WH

The Signify SC100B/02 is a SR transceiver, which is an ideal solution to control individual luminaire. Signify SC100B/02 is a single and compact device for easier installation with luminaire.

Signify SC100B/02 transceiver is D4i certified, and fits to a Zhaga Book 20 rectangular slot. A luminaire with an integrated Signify SC100B/02 works with Indoor Interact systems.

Signify SC100B/02 operates according to the established SR compatible devices standard. Signify SC100B/02 transceiver creates a two wire connection between sensor, driver, and other peripheral SR devices. The use of Signify SC100B/02 eliminates the need for multiple components and auxiliary devices to control the luminaire.

SC100B/02

Features

The following are the key features of SC100B/02:

- Simple two wire connection.
- Compact in size
- Operates with Signify SR devices and Interact ready switches.
- Supports Tunable White luminaires.
- Supports to remotely test the emergency function of the luminaire, if supported by the control system.

Note

- SC100B/02 is a transceiver, not a sensor.

Benefits

The following are the benefits of SC100B/02:

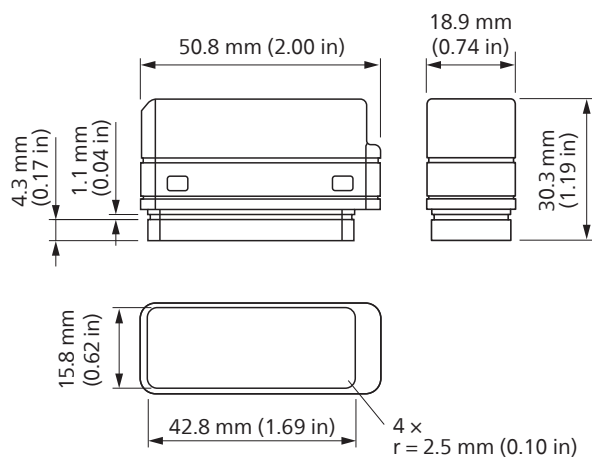
- One device to support various functions which eliminates the need for multiple components and auxiliary devices.
- Suitable to install in existing and as well as new luminaire designs.
- Cost-effective solution for energy-savings

Applications

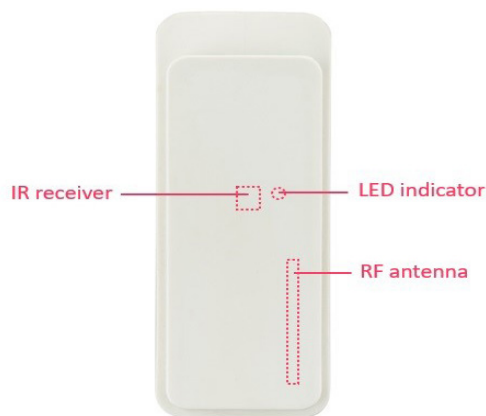
The following are the applications of SC100B/02:

- Individual office, open offices, and Conference rooms
- Lobbies, Stairways, Restrooms, and Break rooms
- Classrooms and any other indoor rooms

Dimensional drawing



Device layout



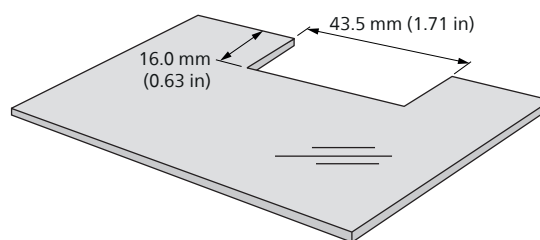
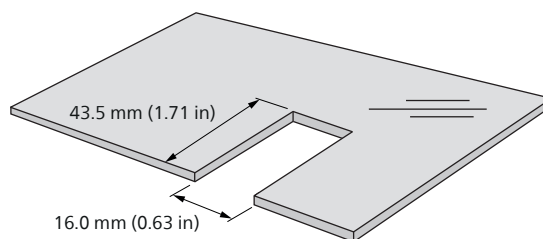
SC100

The IR receiver, LED indicator and RF antenna are hidden behind the plastic front cover

Mounting dimensions

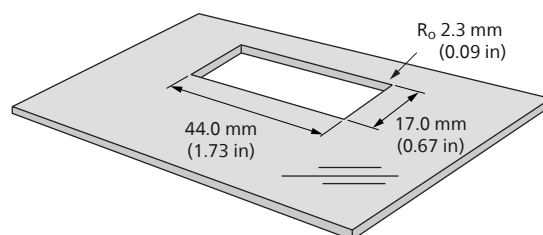
Mounting in U-shaped slot

In sheet metal (max. thickness 1 mm).



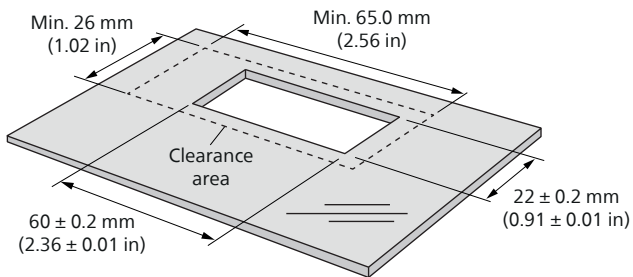
Mounting in cut-out

In sheet metal (thickness 0.7 mm to 1.2 mm).

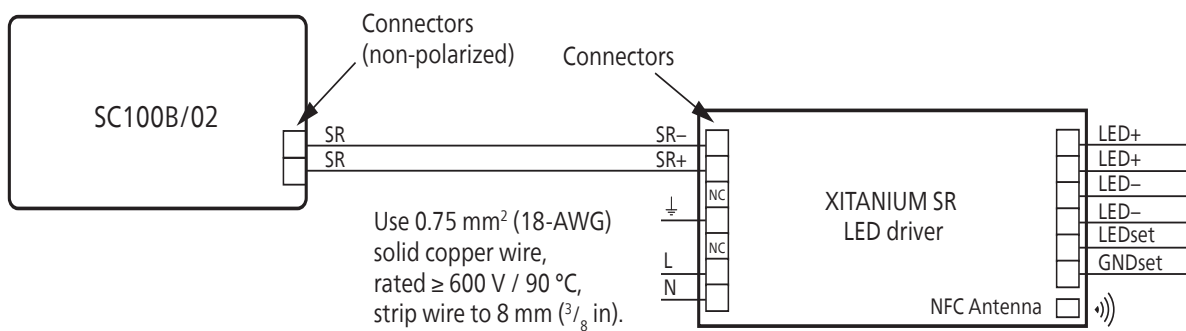


Mounting with a clip for upgradable sensor slot

The SC100B/02 can be mounted in a surface mounted bracket or in a SA0210/05 mounting clip for the upgradable sensor slot. See Accessories for details.



Wiring diagram



Zigbee

This device is compatible with the Zigbee standard IEEE 802.15.4. Firmware can be upgraded over the air.

Specifications

All specifications are typical and at $T_c = 25\text{ °C}$ unless otherwise specified.

Physical information

Overall dimensions	50.8 × 18.9 × 30.3 mm (2.00 × 0.74 × 1.19 in)
Housing F1 slot compatible luminaire hole (l × w)	44.0 × 17.0 mm (1.73 × 0.67 in)
Net weight per piece	18.5 g (0.653 oz)
Volume required inside luminaire (l × w × h)	(50.8 × 19.0 × 24.0 mm) (2.00 × 0.75 × 0.94 in)
Color	White
Connectors	WAGO 2060
Input wire cross-section (solid conductor wire)	0.25 to 0.75 mm ² 24 to 18 AWG
Input wire cross-section (stranded wire)	0.25 to 0.75 mm ² 24 to 18 AWG

Electrical information

Input voltage (V_{in})	12 to 22 V
Input current (I_{in-typ})	8 mA ($V_{in} = 12\text{ V}$, $P_{ZB-tx} = 7\text{ dBm}$)
Input current (I_{in-max})	20 mA ($V_{in} = 12\text{ V}$, $P_{ZB-tx} = 7\text{ dBm}$)
Maximum input current (I_{max})	48 mA (Maximum current drawn from bus)
Sink current (I_{sink})	250 mA (Capability of DALI transceiver)
Typical Input power (P_{in})	140 mW (rated input, $P_{ZB-tx} = 7\text{ dBm}$)
Frequency	2.4 GHz

IR receiver

Carrier frequency	36 kHz
-------------------	--------

Zigbee and Bluetooth Low Energy (BLE)

Communication distance	Zigbee: 25 m (line of sight, package error rate <1%) BLE: 15 m (line of sight, package error rate <10%)
------------------------	--

*The RF-distance at luminaire level is different. It depends on design-in and results of TRP-loss tests.

Environment and approbation

Operating ambient temperature range*	−40 to +65 °C (−40 to +149 °F)
Operating humidity	20 to 85% non condensing
Storage temperature	−40 to +85 °C (−40 to +185 °F)
Storage humidity	0 to 95% non condensing
Ingress protection	IP20
Maximum case temperature (T_{c-max})	70 °C (158 °F)
Approbations	CE, UKCA, CB, UL, RED, FCC, IC, RCM, REACH, ENEC
DALI certification	D4i
Digital interface	Xitanium SR

* Product is capable to work under this condition without component damage, but performance is not tested.

Other

Number of drivers per sensor	4 maximum
Lifetime	10% failure at 100 000 hours, max. T_c
Failure rate	≤ 300 ppm at max. T_c per 1000 hr
Insulation	No insulation between the SR bus and internal circuits.



Accessories

Mounting bezel



Order name	Color	MOQ	Order number	Region of sale
SA0100/05 Mnt Bez SC1xxx/SC2xxx 44x17	White	1	9137 136 20003	Global

Mounting clip for upgradable sensor slot



Order name	Color	MOQ	Order number	Region of sale
SA0200/05 F Mnt Clip SC1xxx/SC2xxx 60x22	White	1	9137 136 20203	Global

F1 slot cover



Order name	Color	MOQ	Order number	Region of sale
SA0300/05 Cover plate 60x22	White	1	9137 136 20403	Global

Recessed mounting plate



Order name	Color	MOQ	Order number	Region of sale
LCA8008 ActiLume round mounting clip	White	1	9137 003 59003	Global

Surface mount box



Order name	Color	MOQ	Order number	Region of sale
SA0600/05 Ind. Surf Mnt SCxxxx/SNSxxx	White	1	9137 136 20803	Global (excluding North America)
SA0600/05 Ind. Surf Mnt SCxxxx/SNSxxx	White	1	9137 136 20813	North America


Mounting clip



Order name	Color	MOQ	Order number	Region of sale
SA0200/15 F Mnt Clip SC1xxx/SC2xxx 60x22	Black	1	9137 010 47703	Global

Ordering information

Commercial product name	Color	MOQ	Order number	Region of sale
SC100B/02 SR Tranceiver WH	White	50	9137 010 69303	Global (excluding North America)

 **Warning**

- Avoid touching live parts.
- Do not use drivers with damaged housing and/or connectors.
- Do not use drivers with damaged wiring.
- Class 1 luminaires must be connected to protective earth.
- Switchable function to make the open load on the driver output is an abnormal condition, and it is not an intended application that will be allowed.

Safety warnings and installation instructions to be taken into account during design-in and manufacturing:

- Do not use damaged or defective contacts or housings.
- Do not use damaged products.
- Do not service the driver when the mains voltage is connected and this includes connecting or disconnecting the LED load.

© 2025 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

All trademarks are owned by Signify Holding or their respective owners.

