Blu2Light

BLUETOOTH® WIRELESS TECHNOLOGY DEVICES FOR BUILDING AUTOMATION

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Blu2Light – The intelligent wireless lighting control solution

Blu2Light is the first completely open Bluetooth® wireless technology system with mesh functionality for the professional lighting market, which, in addition to a variety of functions for lighting control, offers the luminaire manufacturer added IoT benefits with maximum system security.

Blu2Light MultiSensor AIR

Innovative multifunctional Bluetooth® sensor for monitoring indoor climate data.

The Blu2Light MultiSensor AIR is designed for integration into building automation and cloud control of the building. The values detected by the sensor's measuring elements are made available via the integrated mesh-compatible Bluetooth® interface for regulation or control tasks of building systems.

Blu2Light MultiSensor AIR

- **CONFIGURATION VIA LINA CONNECT APP**

- **INTEGRATED BRIGHTNESS AND MOTION SENSOR**

- **CO_2, TEMPERATURE AND HUMIDITY MEASUREMENT**

- **DATA TRANSMISSION VIA BLUETOOTH®**

Blu2Light
MultiSensor AIR

Field of application:

- Innovative multifunctional Bluetooth® sensor for monitoring indoor climate data.
- For wall mounting in a flush mounting box.

Type	MultiSensor AIR
Ref. No.	186954
Communication	Blu2Light Mesh Network
Frequency range	2402–2480 MHz
HF output power	< 10 mW EIRP
Power consumption standby/operation	< 1 W
Power supply	12 V DC
Ambient temperature t_a	0–45 °C
IP protection	IP20
Dimensions (with cord grip)	80x80x30 mm (LxWxH)
Casing	Polycarbonate, white
Weight	42 g
Plug-in terminal for conductor cross-section	0.5–1.5 mm²
Measuring range light sensor	0–1000 lx V(λ), compensated
PIR detection range	max. 5.7 m
Measuring range CO_2 sensor	400 to 10,000 ppm (± 50 ppm)
Measuring range temperature sensor	0–45 °C
Measuring range air humidity	5–95% (non-condensing)
Apps	LiNA Connect
Operating devices	Apple iPad
Version	iOs 10 and higher

Dimensions
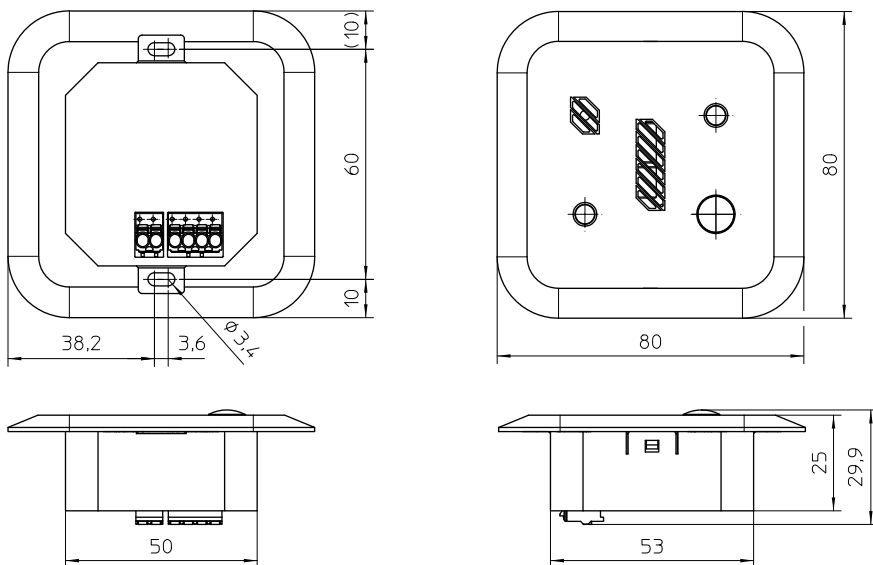
The values in this data sheet may change due to technical innovations and are subject to change without notice.

Blu2Light MultiSensor AIR

A function can be configured for exceeding and falling below freely selectable limit values of CO_2, temperature, humidity or brightness. Additionally, two digital signals can be processed via inputs D1 and D2. Two separate functions can be configured for each input. The measured value information can be visualised in the LiNA Connect App and processed in external systems.

Auto-calibration of CO_2 sensor

The CO_2 sensor built into the Blu2Light MultiSensor AIR has a basic accuracy of ± 30 ppm ± 3%.
In addition, depending on the height above sea level, a "height error" of about 3% is added
per 300 m. The sensors require a periodic calibration of the output value.
This calibration runs permanently in the background.

To calibrate the sensor successfully the following conditions must be fulfilled:
- Continuous operation (no restarts during the entire calibration period)
- Periodic fresh air supply (at least every 18 by 24 h) for at least 5 minutes.
  At least 7 periodic fresh air supply processes are required to complete the calibration.
  The fresh air processes must be carried out with min. 18 hours interval, shorter intervals will be rated.
- Low deviation with outside air supply (max. ± 50 ppm)

If the condition for outdoor air calibration is met, the measured value is calibrated to 400 ppm.
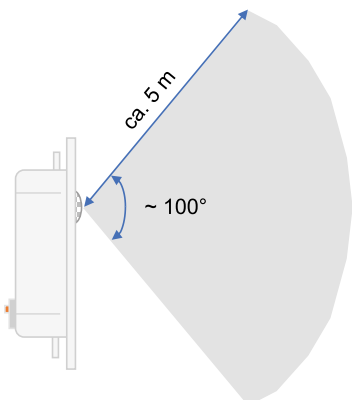
Wiring diagram
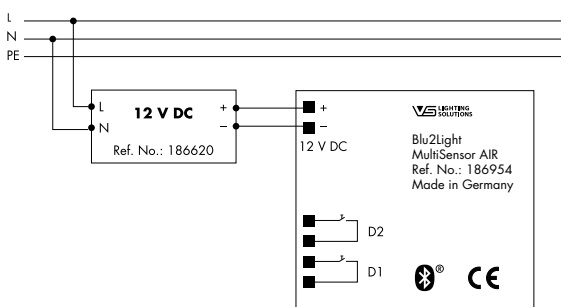
A voltage supply of 12 V DC must be connected on the input side.
The external contacts at D1 and D2 must be able to switch basic-insulated voltage of 30 V / 10 mA DC,
be self-cleaning at 16 V and potential-free.
The maximum total cable length per input (D1 and D2) must not exceed 25 m.

Horizontal detection range PIR sensor (top view)

ca. 5 m

~ 100°

Vertical detection range PIR sensor (side view)
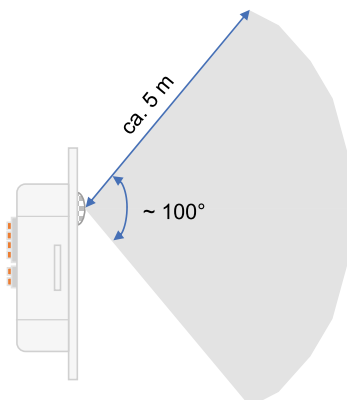
ca. 5 m

~ 100°

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Blu2Light MultiSensor AIR

General Safety Instructions

- Only qualified persons are allowed to install and start up Blu2Light products.
- Prior to installing and commissioning the system, read these instructions carefully. Only this will guarantee correct and safe handling. Please keep these instructions as you may need them later.
- The devices must always be disconnected before any work is carried out on them.
- The applicable safety and accident prevention regulations must be observed.
- Opening by unqualified personnel of the products is prohibited: Risk of death from electric shock!
  The devices must only be repaired by the manufacturer.

Mounting

For mounting the MultiSensor AIR, wall mounting in a flush mounted box is recommended. The recommended mounting height is 1.70 m. In this case, the motion detector (circled in red) must be at the top right. With ceiling mounting, a representative CO_2 measurement is usually not possible.

1.70 m
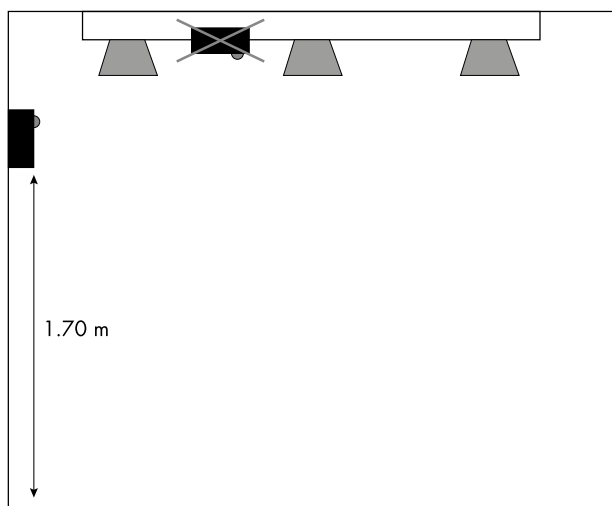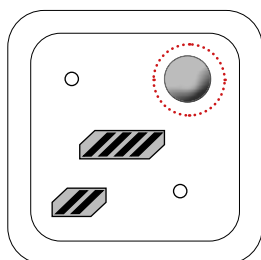
Power supply

This product does not contain its own power supply and is powered by 12–24 V DC SELV power supplies. A suitable 12 V power supply (Ref. No. 186620) is included.

Overvoltage protection of the 12 V interface and inputs

Connecting higher voltages than 24 V DC will destroy the products. Operation with voltages < 12 V DC / > 24 V DC or 230 V AC is generally not permitted!

Installation instructions

- Conductor cross-section input side: 0.5–1.5mm² for rigid or flexible conductors
- The PIR sensors detect changes in thermal radiation. All information on ranges refers to a room temperature of 20 °C.

Setup and operation

- The Blu2Light luminaire installation devices are configured with LINA Connect App.
- For the exact procedure for configuring the devices, please refer to the instructions in the Blu2Light App or the corresponding documentation.
- An Apple iPad is required for setup. This is not included in the delivery.
- A gateway is required for exact configuration and data acquisition.

LINA Connect configuration	iOS
Tablet	Version 10 and higher

Bluetooth® wireless technology

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$C\kern-0.3em\epsilon$ CE

We, Vossloh-Schwabe Deutschland GmbH, herewith confirm that these devices comply with the basic requirements of the directive 2014/53/EU and other relevant directives. The entire text of the declaration of conformity can be obtained from the following address: www.vossloh-schwabe.com

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