

BSH-LUX

AnaLink transmitter with built-in light intensity sensor
Measuring range: A: 5-5000 LUX, B: 3000-300.000 LUX
Uses only 1 channel
Channel coding by BGP-COD-BAT
Easily mountable
Supplied by smart-house
Delivered with pre-programmed address on I/O 1



GENERAL SPECIFICATIONS

Channel programming	BGP-COD-BAT
Channel assignment	1 channel, freely programmable Pre-programmed to address B6
Environment	
Degree of protection	IP 44
Operating temperature	-10 to +60°C (14 to +140°F)
Connection	
Screw terminal	Pin 1: smart-house Pin 2: GND

Housing		
Material	ENSTO	Cubo D 050504
Housing	Lexan (Polycarbonate)	
Plug	Nylon	
Color	Translucent / Offwhite	
Dimensions (W x H x D)	55 x 53 x 36 mm	
Settings		
Range A:	5-5000 LUX	
Range B:	3000-300.000 LUX	
	Range is changed by switch	

SENSOR SPECIFICATIONS

Light measuring range	5 LUX to 300 kLUX
Characteristic deviation	-20% to + 20%
Measuring error by specific operating temperature	-30% to + 30%
Response time	6s to 34s

SUPPLY SPECIFICATIONS

Power Supply	Supplied by smart-house
Rated operational current	< 4 mA

MODE OF OPERATION

smart-house channel allocation

The LUX sensor transmits the light value using the AnaLink principle, i.e. the sensor transmits the value serially on one channel.

The LUX sensor transmits its Analink value logarithmically. If the LUX value is transferred to an external unit, this unit must support the following logarithmic function:

$$\text{Range A:} \\ \text{LUX} = 5 \cdot 10^{\left(\frac{3 \cdot \text{Analink}}{255}\right)} \quad \text{and}$$

$$\text{Range B:} \\ \text{LUX} = 3000 \cdot 10^{\left(\frac{2 \cdot \text{Analink}}{255}\right)}$$

Mounting

Sunlight Protection

As a rule, the BSH-LUX LUX sensor should be mounted where the outdoor light comes into the room to be monitored, e.g. on the wall where the windows are to be darkened by roller blinds. If the sensor is over-shadowed by an overhang of the roof or similar, this will increase the darkness at the sensor, which in connection with a dimmer function will cause the dimmer to switch on prematurely and to switch off too late.

Twilight

In twilight mode the BSH-LUX must be mounted on the wall pointing northwards, so that the sun light cannot reach the lux sensor.

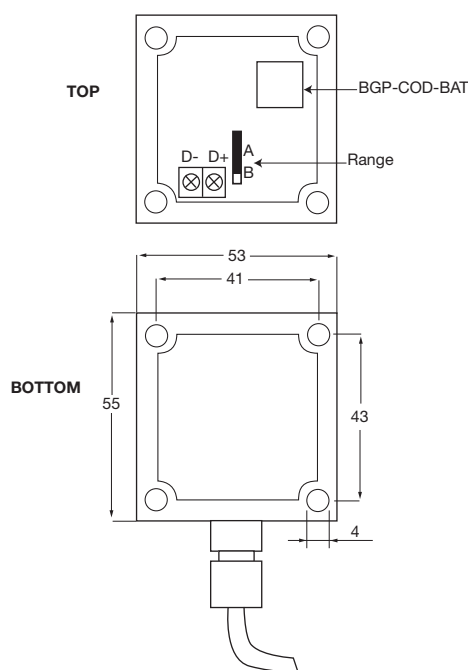
If the LUX sensor is used to control a light source, an optical feedback from the light must be avoided to the greatest extent, since the light level will affect the LUX sensor and that can cause unwanted on/off cycles. This can be avoided by placing the LUX sensor so that the light source will not affect the sensor.

When selecting the place of monitoring, environmental effects (dust, dirt, snow) must also be taken into consideration, since in the long run they can influence the light sensitivity of the LUX.

TYPE SELECTION

Supply	Ordering no.
By smart-house	BSH-LUX

DIMENSIONS / WIRING DIAGRAM



All dimensions in mm