

SL0300

D-60-53

Outdoor light transmitter 4–20 mA

8 June 2004

SLO300 is an electronic light transmitter that converts a lux measurement into an electric current signal. It has two sensitivity ranges to suit different light levels: 0–400 lx (e.g. for controlling outdoor lighting) and 0–20 klx (for controlling sunshade systems).

The transmitter is delivered as a complete unit, comprising the sensing element, an amplifier mounted in a housing, which is resistant to ultra-violet light.

The transmitter is intended for wall mounting outdoors.

The sensitivity peak is for light at an angle of incidence of 0° to the perpendicular. The sensor has the same spectrum sensitivity peak as the human eye.

The transmitter is connected with a 2-wire cable, which serves both as power supply and for signal transmission.

The reading of the measured signal is done over an external load resistance R_1 .

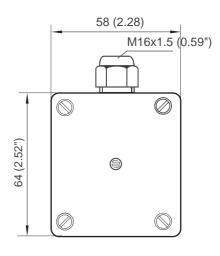
The supply voltage $U_{\rm M}$ is the total of the voltage over the transmitter $U_{\rm G}$ and the voltage drop across the load resistor and the wire resistances.



TECHNICAL SPECIFICATION

Part number 0-069-2058-0
Range Jumper : 0–400 lx
Jumper: 0–20 klx
Signal output 4–20 mA
Materials:
Housing polyamid plastic
Enclosure rating IP 65
Dimensions (in mm) according to figure
Weigh100 g
weight, incl standard packing, in brackets
Voltage across transmitter U _G max. 36 V DC
U _G min. 15 V DC
Maximum load (ohm) $R = (U_{M} - 15)/0,02$
Accuracy ±5%
at ambient temp of 25°C and $U_g = 24 \text{ V DC}$
Wavelength at max. sensitivity600 nm (standard
light A/2854K colour temp.)
Temperature dependence ±0,05%/°C
at ambient temp. of 25 °C and $U_g = 24 \text{ V DC}$
Voltage dependence 0,01% for $U_{\rm G}$ = 15–40 V DC
Load dependence 0,01% for R = 0 to max. R
Ambient temperature min. –20 °C, max. +70 °C
Standards:
EMC EN 50081-1, EN 50082-1

Dimensions in mm (inches)

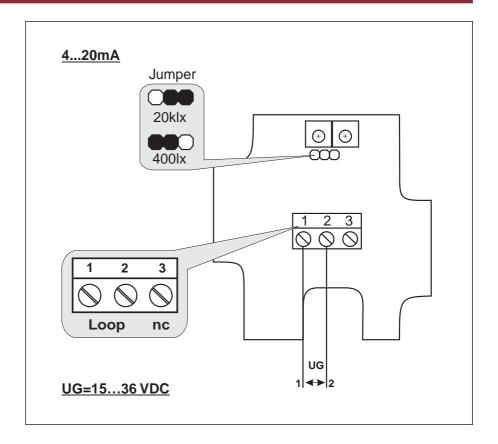


WIRING

The transmitter will operate even if the cable connections at 1 and 2 are reversed.

Cable: 0,2-1,5 mm².

Note! Avoid contact with the sensor terminals if the connection wires are live.



ADJUSTMENT

The unit is supplied ready calibrated with a specified range and precision.

No further calibration is normally required.

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