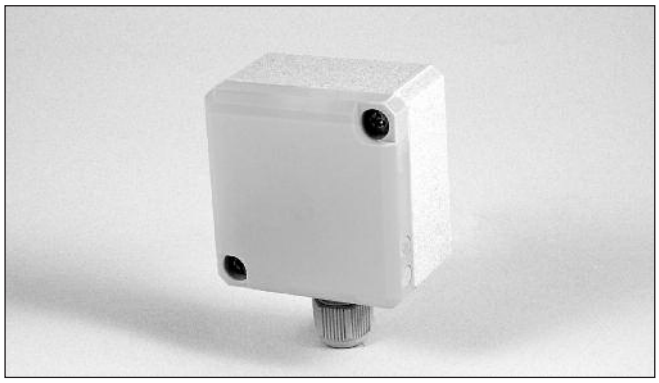
Light Intensity Sensor
Type G 8911 1120



- **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 GAP 1605**
- **Easily mountable**
- **Supplied by Dupline®**

Product Description

The analog light transmitter G89111120 makes it possible to convert analog light values to be transmitted on the Dupline® bus.

The design of the LUX sensor makes it possible to mount the sensor discreetly, e.g. on walls.

No external power supply is required, since the sensor is supplied from the Dupline® signal wires.

Ordering Key

G 8911 1120

Type: Dupline®
LUX- housing
Transmitter
No. of Channels
No. of Inputs

Type Selection

Supply	Ordering no.
By Dupline®	**G 8911 1120**

Supply Specifications

Power Supply	Supplied by Dupline®
Rated operational current	< 4 mA

Sensor Specifications

Light measuring range	5 LUX to 300 kLUX
Characteristic deviation	-20% to + 20%
Measuring errror over temp. range	-30% to + 30%
Response time	6s to 34s

General Specifications

Channel programming		GAP 1605
Channel assignment		1 channel, freely programmable
Environment		
Degree of protection		IP 44
Operating temperature		-10 to +60°C (14 to +140°F)
Connection		
Screw terminal		Pin 1: Dupline® 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

Dupline®
Fieldbus Installationbus

Mode of Operation

Dupline® 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:

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

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

Mounting
If the LUX sensor is used to control a light source, an optical feedback from the light must be avoided to the greatest extend, 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.

Sunlight Protection
As a rule, the G89111120 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 overshadowed 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 G89111120 must be mounted on the wall pointing northwards, so that the sun light cannot reach the lux sensor.

Dimensions/Wiring Diagram