

## Datasheet

Subject to technical alteration  
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## Application

Sensor for light measurement in outdoor areas. Designed for locking-on control and display systems. The sensors have an integrated color filter (green filter) which is adapted to the sensitivity of human eyes.

## Types Available

Li65	A	active, 4..20 mA
	V	active, 0..10 V
	LON	active, FTT10

## Security Advice – Caution



The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorized modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

## Notes on Disposal



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

## General remarks concerning sensors

Especially with regard to passive sensors in 2-wire conductor versions, the wire resistance of the supply wire has to be considered. If necessary the wire resistance has to be compensated by the follow-up electronics. Due to self-heating, the wire current affects the measurement accuracy, so it should not exceed 1 mA.

When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ( $\pm 0,2$  V). When switching the supply voltage on/off, onsite power surges must be avoided.

## Technical Data

Measuring values		light
Output voltage	V	1x 0..10 V, min. load 5 k $\Omega$
Output Amp	A	1x 4..20 mA, max. load 500 $\Omega$
Network technology	LON	LON FT (free topology)
Power supply	V/LON	15..24 V = ( $\pm 10\%$ ) or 24 V ~ ( $\pm 10\%$ )
	A	15..24 V = ( $\pm 10\%$ )
Power consumption	V	typ. 0.15 W (24 V =)   0.5 VA (24 V ~)
	A	max. 20 mA (24 V =)
	LON	typ. 0.5 W (24 V =)   2 VA (24 V ~)
Measuring range light		0..2 kLux   0..20 kLux   0..100 kLux, LON: 0..2 kLux   0..20 kLux   0..65 kLux, selectable at the device
Accuracy light		$\pm 5\%$ of measuring range
Sensor		photodiode with green filter (BPW21)
Enclosure		PA6, pure white, cover PC, translucent, with quick lock screws
Protection		IP65 according to EN 60529
Cable entry		M20 for cable max. $\varnothing=8$ mm
Connection electrical		terminal block, max. 1.5 mm <sup>2</sup>
Ambient condition		-22..+158 °F, max. 85% rH short term condensation
Notes		please contact us for other ranges.
Weight	V/A	3.53 oz.
	LON	4.23 oz.

Calibration is done at 20 kLux with 24 V = and 70 °F ( $\pm 9$  °F).

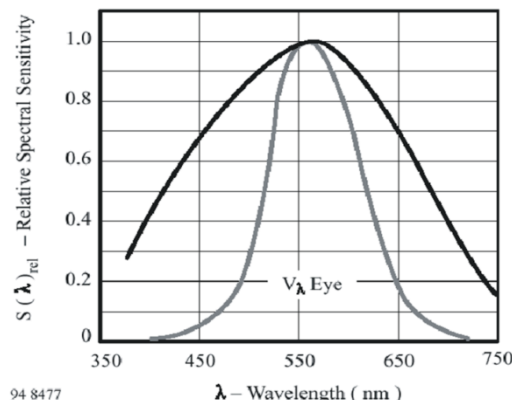
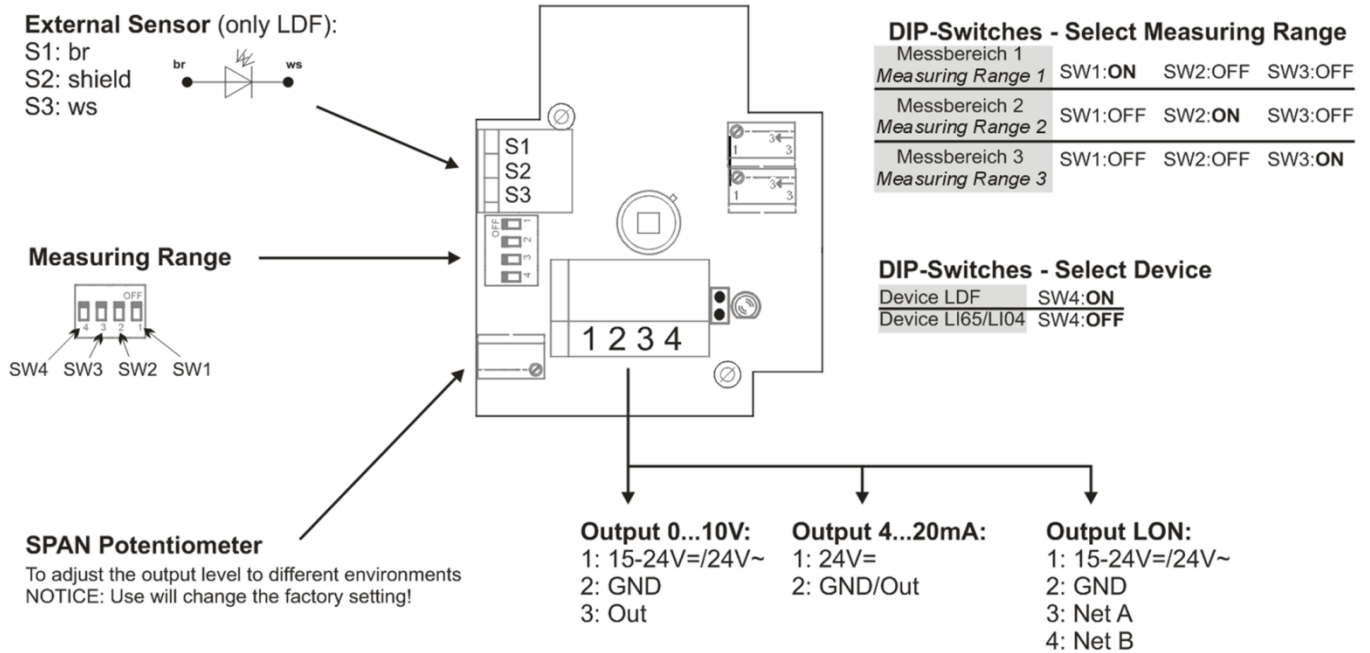


Figure 5. Relative Spectral Sensitivity vs. Wavelength

## Mounting Advices

The sensor is to be fixed with screws (see accessories).

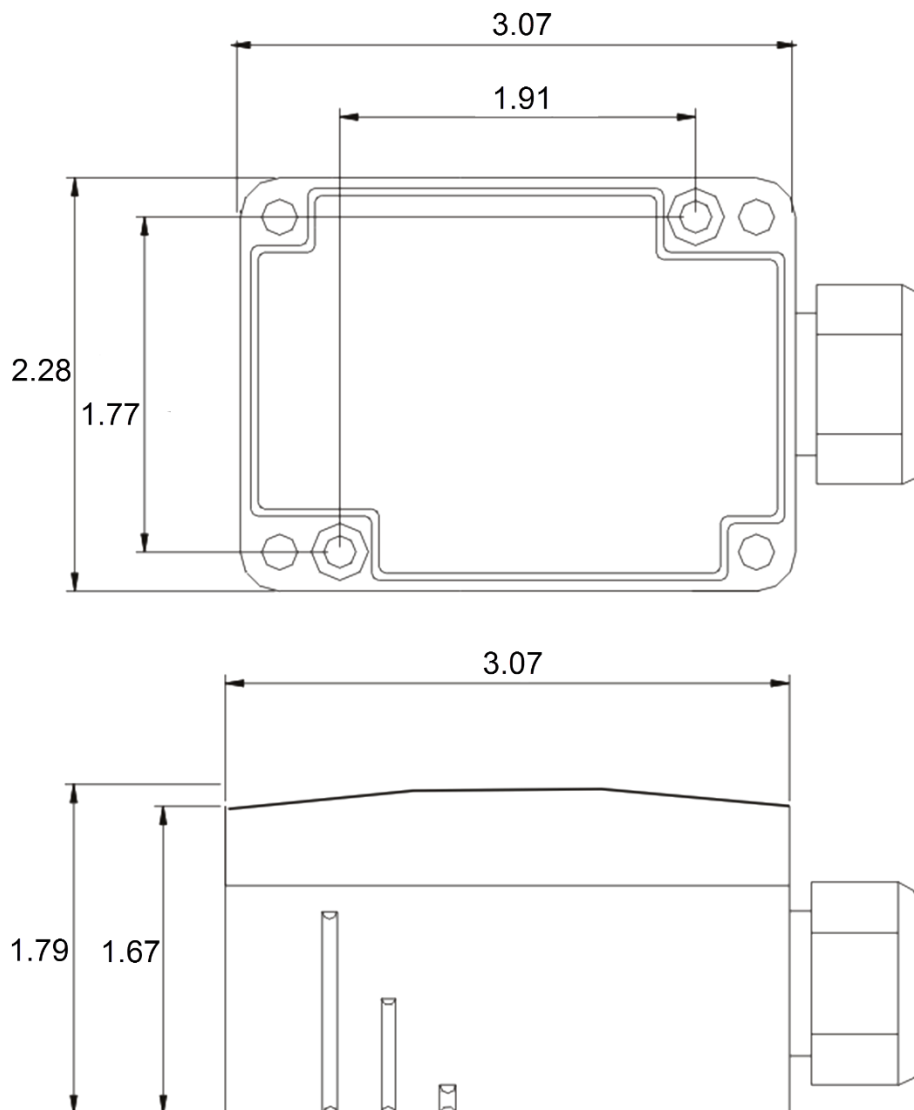
## Connection Plan and Configuration



### LON:



**Dimensions (in.)**



**Accessories (optional)**

Rawlplugs and screws (2 pcs. each)

Item-No.: 102209