

## LM-TLM

### Light sensor, outdoor

Art. no. 20724105

External daylight sensor used to monitor daylight values and sky conditions

#### Application

The daylight sensor uses 8 light sensors to detect the sky condition and the direction of the sun and to measure the intensity of the daylight. The light sensors are V-lambda compensated. The automation computers in the LUXMATE LITENET (Flexis) or LUXMATE Professional (LRA) system use the measured values for daylight-based control of the LUXMATE installation.

#### Design notes

The internal heating and ventilation system prevents condensation at the sensor tip.

It is not necessary to bring the sensors in line.

The mounting tube (permissible diameter 42 – 50 mm) is not included in the standard delivery.

The LM-TLM is installed at the highest point of the building where there is no shade. It must be properly fixed to prevent rotation. Note: the marking (north direction arrow) on the sensor base must be directed towards the north.

Wind load:

Wind speed	Dynamic pressure	Wind load
120 km/h	800 N/m <sup>2</sup>	64 N
140 km/h	1100 N/m <sup>2</sup>	87 N
160 km/h	1440 N/m <sup>2</sup>	114 N

Lightning protection:

Adhere to the applicable lightning protection regulations:

The lightning protection system must be installed by an authorised specialist technician.

Protection against direct lightning strokes:

Install daylight sensor within the protection range of the lightning protection system

Connect LM-TLM to the potential equalisation bar

Protection against indirect damage from lightning:

Surge diverter type 3 /D

Power supply - rated arrester voltage: min. 264V

LM bus - rated arrester voltage: min. 16V

Protection against indirect damage from lightning in switch cabinet:

Power supply - rated arrester voltage: min. 264V

Main distributor:

Surge diverter type 1,2 (EN) / B,C (VDE) - combined arrester

Subordinate distributor:

Surge diverter type 2 / C coordinated with type 1 /B arrester in main distributor

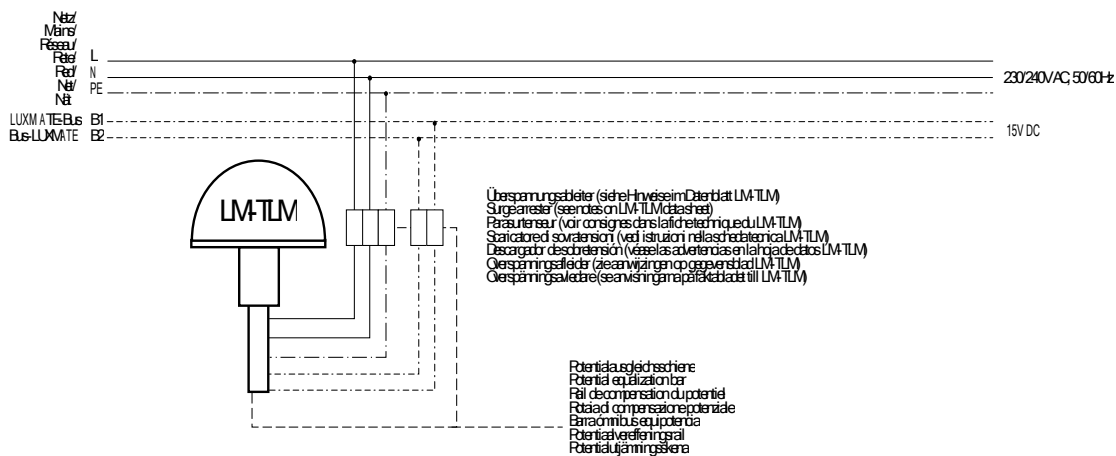
LM bus:

Surge diverter type 3 /D

Rated arrester voltage min. 16V (max. possible bus voltage)



## Wiring scheme



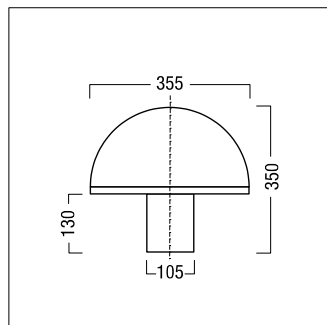
## Mounting and installation instructions

- Connect mains lead (3-wire, L/N/PE) and bus cable (2-wire), using the supplied screw terminals. Secure mains and bus cable against disconnection using strain relief devices!
- Function earthing: Connection of earth conductor of mains plug to building earthing system.
- Protective earthing: The securing screws and tooth lock washer are conductive and connect the top section to the base. The earth cable at the base is connected to the gin pole by means of a screw and tooth lock washers used for the fixture of the device to the mast.
- Observe the applicable lightning protection regulations: Protection against direct and indirect lightning stroke see notes on LM-TLM data sheet.
- The LM-TLM is installed at the highest point of the building where there are no shadows. It must be fixed to prevent rotation.
- Note: the marking (north direction sign) on the sensor socket must be directed towards the north.
- The mounting tube (diameter 50mm) is not contained in the provided.

## Technical data

Nominal voltage	230/240 V AC, 50/60 Hz
Connected load	207-253 V AC, 50-60 Hz
Power loss	max. 2W without heating max. 39W with heating
Inputs	LUXMATE bus (B1, B2) Power supply (L, N, PE)
Terminals	0.5...2.5mm <sup>2</sup> , Screw plug-type connector
Sensors	8 light sensors
Protection class	Class I (earthing connection)
Housing material	Acrylic glass, 1.4571 stainless steel
Installation	on mounting pole: diameter 42...50mm Near the building's lightning arrester
Dimensions	355mm diameter, 350mm height
Permissible ambient temperature ta	-20 °C ... +60 °C
Weight	Approx. 8 kg

## Dimension



## Label/connections

