Light Sensor

Featuring LoRaWAN®

EM500-LGT



EM500-LGT is designed for measuring light in harsh environments and transmitting data using LoRaWAN® technology. With this low power consumption technology, EM500-LGT can work up to 10 years with 19000 mAh battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually.

EM500-LGT is widely used for outdoor applications like smart agriculture, urban lighting, etc.

◆ Features

- Wide measuring range and high precision
- Ultra-wide-distance transmission up to line of sight of 10km
- IP67 waterproof enclosure for harsh environment applications
- Built-in 19000 mAh replaceable battery and work for 10 years without replacement
- Store historical records locally and support retransmission
- Equipped with NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with Milesight IoT Cloud solution

◆ Applications

- Smart buildings
- Urban lighting
- Greenhouse control
- Smart agriculture
- Weather monitoring

◆ Specifications

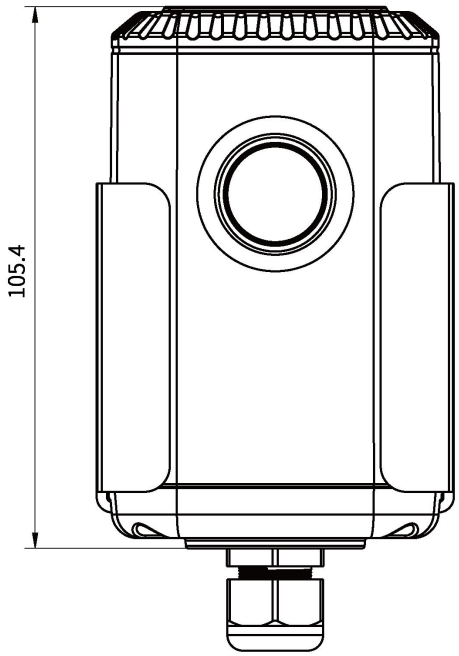
Wireless Transmission	
Technology	LoRaWAN®
Antenna	Internal Antenna
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
Range	0 - 100000 lux
Accuracy	±3%
Resolution	1 lux
Others	
LED	1 × LED Indicator (Internal)
Button	1 × Power/Reset Button (Internal)
USB	1 × USB Type-C (Internal) for Configuration and Console
Software	
Power On & Off	NFC, Power Button (Internal)
Configuration	Mobile APP(via NFC), PC software(via USB Type-C), Downlink
Advanced Feature	Data Storage (1,000 entries), Data Retransmission, Data Retrievability, Threshold Alarm
Physical Characteristics	
Cable Length	3 m
Power Supply	1 × 19000 mAh ER34615 Li-$SOCL_2$ Battery
Battery Life*	10 years (10 min interval, 25 °C)
Operating Temperature	Transceiver: -30°C~70°C Light Sensor: -30°C~60°C
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	Transceiver: IP67 Light Sensor: IP65
Housing & Color	Transceiver: ABS + PC, Grey Light Sensor: Aluminum alloy, White
Weight	Transceiver: 333g (With battery and mounting bracket) Light Sensor: 280g (With cable)

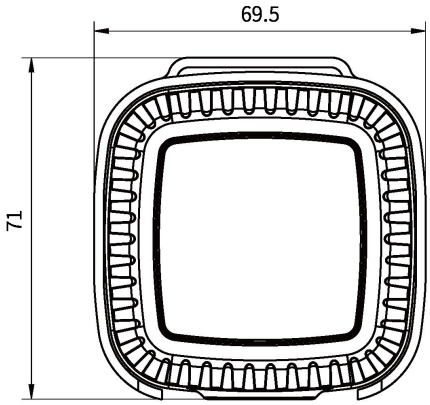
Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Light Sensor: 64 × 58 × 34 mm (2.5 × 2.3 × 1.3 in)
Installation	Pole, Wall or DIN Rail Mounting
Approvals	
Regulatory	CE, FCC, Telec, ICASA
Environmental	RoHS

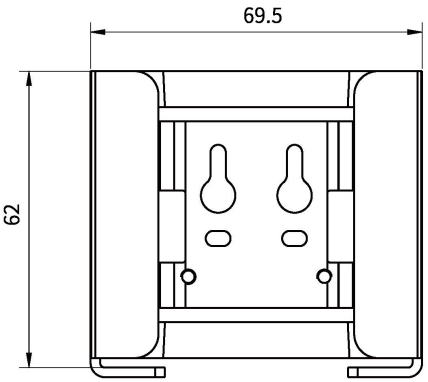
* Tested under laboratory conditions and for guideline purposes only.

◆ Dimensions(mm)

Transceiver:







Light Sensor:

