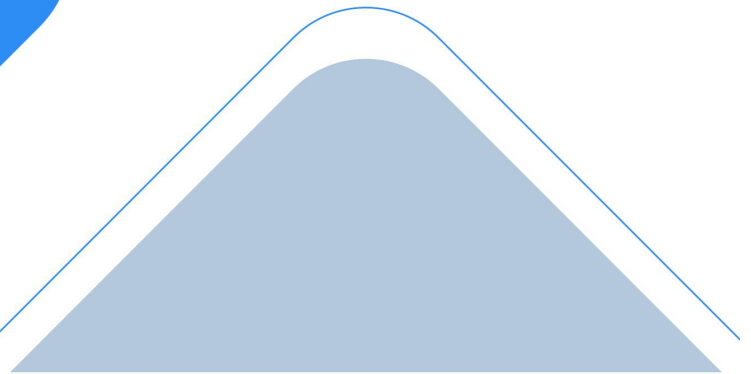# EM500-LGT

Light Sensor

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

➢ IP66 waterproof enclosure for harsh environment applications

➢ Built-in 19000 mAh replaceable battery and work for 10 years without replacement

➢ 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®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP Class A
Measurement	
Range	0 - 100000 lux
Accuracy	±3%
Resolution	1 lux
Operation	
Power On & Off	NFC, power button (Internal)
Configuration	Mobile APP(via NFC) or PC software(via USB Type-C)
Physical Characteristics	
Cable Length	3 m
Power Supply	19000 mAh Li-SOCL$_2$ battery (ER34615)
Battery Life*	4 years (10 min interval, SF12)
	>10 years (10 min interval, SF7)
Operating Temperature	-30°C to +60°C
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	IP66(Transceiver)/IP65(Light Sensor)
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

* Tested under laboratory conditions and for guideline purposes only.