



CG500LS ZigBee Light Sensor

## Description

- Support ZigBee wireless remote data transmission for central HA system.
- Based on IEEE 802.15.4.
- 2.4GHz radio frequency.
- Light level detection
- 0 to 200000 lux, accuracy +/-3%
- sampling and transmission rates are configurable
- Software programmable alert status
- Powered by AC220V
- Wall mount design
- Dimension: 86 x 117 x 41 mm
- Color available : Grey

## Introduction

CG500LS is a ZigBee Light Sensor. It is designed especially for home automation and energy management use. The light sensor head detect light level and output lux level digital data for ZigBee data transmission. The digital data will be received by the Citygrow ZigBee base station for monitoring, control, energy saving or special usage according to the project needs.

The product is powered by external AC power, it can be wall mounted or connected to an optional sensor head cable assembly for ceiling mount.

The sensor technology is similar to human eye. The detected light spectrum is in line with human eye spectrum. Human eye cannot see light >700nm(infra red) or <400nm(ultra violet), but the sensor is able to detect much higher level of light than human eye.

For reference information:

1. Dark night: 0.001 to 0.001 lux
2. Moon night: 0.02 to 0.3 lux
3. Cloudy day indoor: 5 to 50 lux
4. Cloudy day outdoor: 50 to 500 lux
5. Sunny day indoor: 100 to 1000 lux
6. Light level for reading: 50 to 60 lux
7. Light level for taking photo: 140 lux
8. Green house for plant: 1 to100000 lux



## Specification

Item	Specification
Power requirement	AC220V
ZigBee Wireless communication	<ul style="list-style-type: none"> <li>• ZigBee wireless remote control.</li> <li>• Based on IEEE 802.15.4. standard</li> <li>• 2.4GHz radio frequency</li> </ul>
RF distance	<ul style="list-style-type: none"> <li>• 100M ( open area)</li> </ul>
Sensor spec.	<ul style="list-style-type: none"> <li>● 0 to 200000 lux</li> <li>● 0-200 lux(for road light), 0-2000 lux(for indoor light), 0-200000 lux(for outdoor)</li> <li>● Accuracy +/-3%</li> <li>● Operation temperature 0 to 65 deg C</li> <li>● 50Hz and 60Hz noise suppression</li> </ul>
Unit Dimension L X W x D (mm)	86x117x41mm
Cabinet Dimension L x W x D(mm)	86x86x41mm
Storage	-20 deg C to 70 deg C