



WLRC-S20



Wireless Light Sensor

This commercial-grade indoor/outdoor wireless light sensor can detect the intensity of light in LuX of the environment. This can be used in many industries where the intensity of the light matters, like Greenhouse, Film Studios, and Professional sports stadiums. This device can be used with WLRI-P11M smart power outlet, to create an automated lighting system. Light sensors can be used as a part of automation for grow up operations where light intensity is vital.

Features:

- Super Long Range Signal Penetration
- 5 years plus Battery Life*
- Easy Installation
- Frequency Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Encrypt-RF™ Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- Over-the-air updates
- Interactive WatchNET IoT platform with dashboard, search and notification settings
- * Magnetized ABS enclosure for easy installation



Applications:

- Green house farming
- E-Farming
- Film Studio
- Movie Theatres
- Professional sports stadiums
- Simple automation

Schematic Diagram:



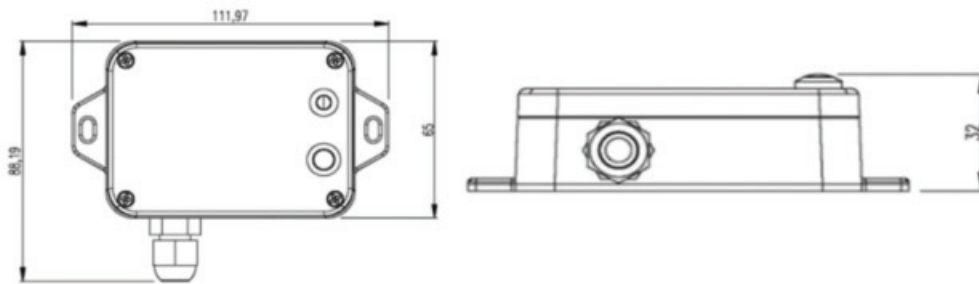
Technical Specifications

Electrical	
Input Power	2x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)*
Sleeping Mode	18uA
Wake up Mode	6.3mA@3.3V
Low Voltage Threshold	3.2V
Transmitting current (max)	120mA@3.3V
Receiving current (max)	11mA @3.3V
Battery Measurement Accuracy	±0.1V
<i>*Specific electrical characteristics may vary depending on the power supply voltage.</i>	
Light Sensor	
Supply Voltage Range	2.3VDC-3.3VDC
Light Sensor Model	TSL45315
Illuminance Range	3LUX-220KLUX
Communication Method	I2C Communication
Frequency	
TX Power	19dBm±1dBm
Rx Sensitivity	-136dBm (LoRa, Spreading Factor=12, Bit Rate=293bps) -121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Built-in antenna
Communication Range	Up to 500m/0.310miles, the actual transmission distance depends on the environment*
Data Transfer Rate	0.3kbps ~ 50kbps
Spread Technique	LoRa/FSK
Available Frequency	EU863-870, US902-928. Configured before shipment
Physical	
Dimension	L:112mm x W:65mm x H:32mm / L:4.41" x W:2.6" x H:1.26"
Weight	150g / 0.33lb
Protection Class	Main Part IP65
Environment Temperature Range	-20°C ~ 55°C / -4°F ~ 131°F
Environment Humidity Range	<90%RH (No condensation)
Storage Temperature	-40°C ~ 85°C / -40°F ~ 185°F

* Actual signal range may vary depending on the environment.

* Battery life is determined by sensor reporting frequency and other variables.

Dimensions



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