



## WLRC-A11



### Wireless RS485 Adapter

WLRC-A11 is RS485 to Wireless Converter that can communicate to devices that use RS485 communication protocol. This adaptor uses 12V DC power. Cloud based control and notifications from legacy devices is not possible.

#### 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:

- Monitor legacy controllers and devices that communicates on RS485 bus
- Controls DVRs/PTZ Cameras on alarm
- Can do basic automation control with selected controllers

#### Schematic Diagram:



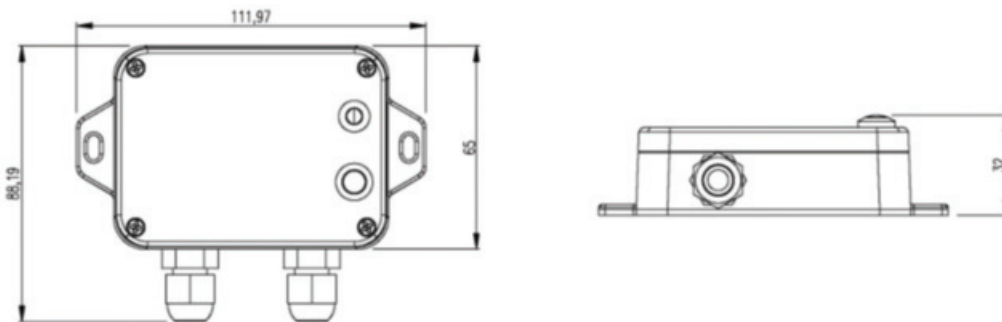
## Technical Specifications

Electrical	
Power Supply	DC 12V adapter power supply
Working Current	35mA (when there is no external sensor)
<i>*The actual electrical characteristics will vary depending on the power supply voltage.</i>	
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:88.19mm x H:32mm / L:4.41" x W:3.47" x H:1.26"
Weight	160g / 0.35lb
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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