



WLRC-M175 / WLRC-M375



Wireless 1/3-Phase Current Meter with 75A Clamp-On

This commercial-grade current meter can be used to monitor the current usage of any equipment whether it is single-phase or three-phase. The device comes in a sealed box making it moisture-proof and withstands extreme conditions. This device can be installed on any metal surface as it comes with an inbuilt magnet. The core of this sensor that goes around the live wires can be opened and are easy to install on an existing setup. Current monitors can help in predictive maintenance of any equipment that may overdraw or work using high current than specified by the manufacturer.

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:

- Compressor / Generator current monitoring
- Equipment working or not working status
- Overload current monitoring
- Predictive maintenance of machinery
- Smart energy management

Schematic Diagram:



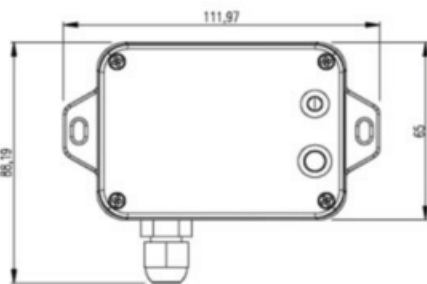
Technical Specifications

Electrical	
Input Power	2x 3.6V ER14505 AA lithium batteries (3.6V/2400mah/section)*
Sleeping Current	25uA
Wake up Current	7mA
Transmitting current (max)	127mA@3.3V
Receiving current (max)	Receiving: 11mA @3.3V / Transmitting: 127mA @3.3V
Battery Measurement Accuracy	±0.1V
Low Voltage Threshold	3.2V
Current Measurement Accuracy	<±1%
Current measurement Accuracy Range	100mA to 75A (depending on the current transformer configuration)
<i>*Specific electrical characteristics may vary depending on the power supply voltage.</i>	
Frequency	
Frequency Range	863MHz-928MHz 470MHz-510MHz
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
Current Transformer	
Rated Input Current	30A, 50Hz~60Hz
Rated Output Current	10mA
Saturation Current	≥75A
Ratio	3000:1
Load Resistance	10Ω
Accuracy Level	1%
Isolation Withstand Voltage	3000V
Housing Material	Flame Retardant Grade 94-V0 UL Material
Environmentally Friendly	In line with ROHS
Working Temperature	-40°C ~ 85°C / -40°F ~ 185°F
Physical	
Dimension	L:112mm x W:65mm x H:32mm / L:4.41" x W:2.6" x H:1.26" Sensor Size: 42.5mm x 27.5mm x 25mm / 1.67"x 1.08" x 0.98" External Sensor Length: 900mm/35.43"
Weight	Main Part: 141g / 0.31lb / Sensor: 49.6g / 0.15lb
Protection class	Main Part IP53 / External Sensor IP30
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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