

## Wireless Tunnel™ Battery Monitoring (WTS-BATTMON)

### Wireless Monitoring of Batteries and Solar Panels

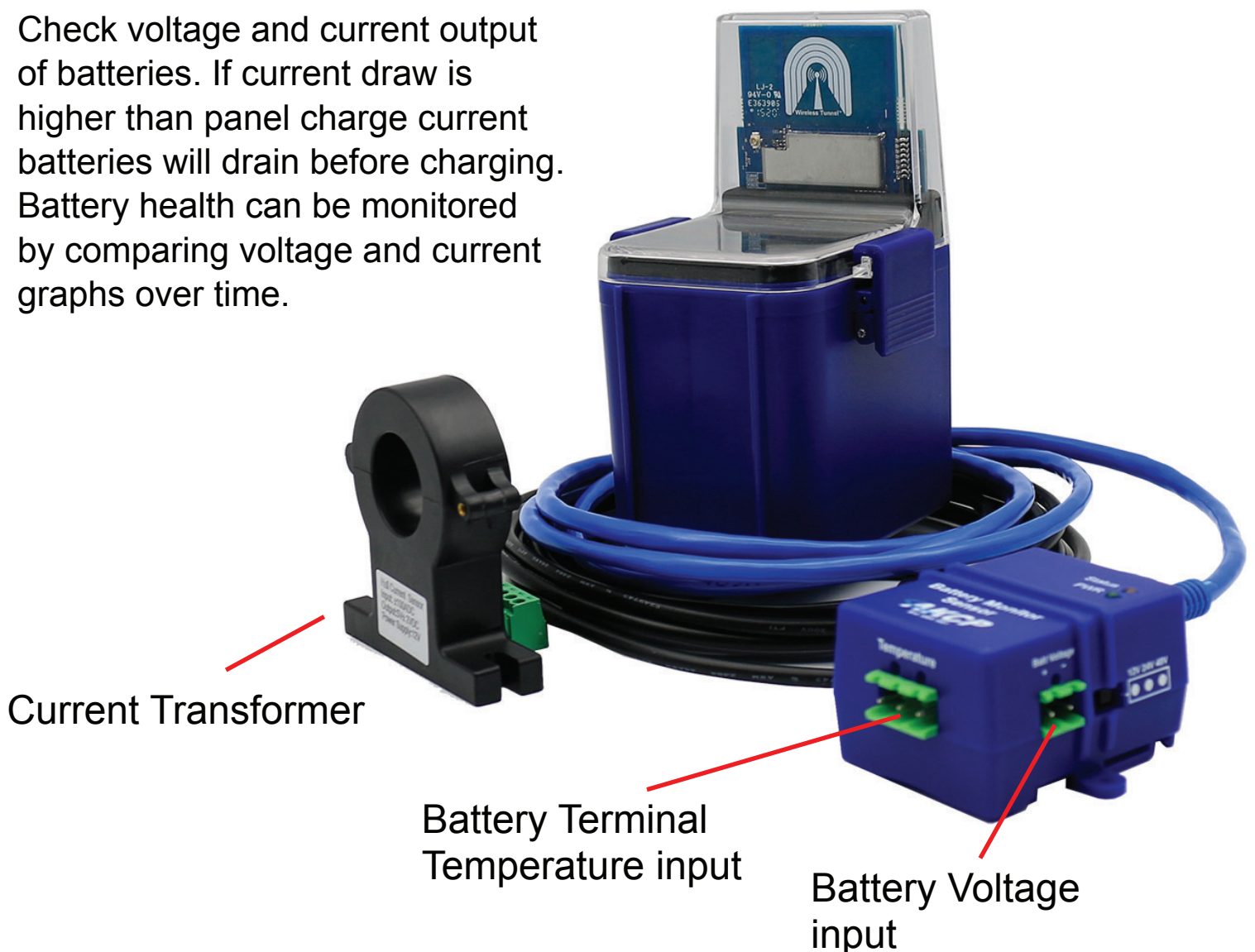
This Wireless Tunnel™ sensor will check solar panel voltage and current output, as well as battery banks or cells. Monitoring both sides of the system, will ensure the panels are outputting optimum power to charge the batteries, and that batteries are in good health to satisfy your power draw requirements.

#### Solar Panels

Check that solar panels are still functioning, and that voltage and power output is sufficient. Poor performance can be an indication of dirty panels that need cleaning, panels that require replacement or more optimal position for sun exposure.

#### Batteries

Check voltage and current output of batteries. If current draw is higher than panel charge current batteries will drain before charging. Battery health can be monitored by comparing voltage and current graphs over time.



## WTS-BATTMON - Technical Specification

<b>Power Rating</b>	<p>Input Voltage and Current ratings :</p> <p>Voltage: 0~60VDC (3 configurable ranges : 0~15V, 0~30V or 0~60V)            Current: DC current via external CT            + 50A (standard)            + 100A            + 200A            + 400A            + 500A            + 600A            + 800A            + 1000A            + 1500A</p>
<b>Power Measurements</b>	<p>- Voltage (V) : +/-0.05% Full-Scale, error +/-0.05% Full-Scale            - Current (A) : +/-0.05% Full-Scale, error +/-0.05% Full-Scale, Temperature Drift : +/-0.02%/°C            - Power (W) : +/-0.05% resolution</p>
<b>Temperature monitoring</b>	<p>- Temperature sensor with 1 meter cable            *range -40°C to +75°C</p>
<b>Inputs</b>	<p>Hardwired with following plugs :</p> <ul style="list-style-type: none"> <li>- Phoenix connector for voltage</li> <li>- Phoenix connector for temperature</li> <li>- Phoenix connector for external current transformer</li> </ul>
<b>Status Indication</b>	<p>WTS module :</p> <ul style="list-style-type: none"> <li>- LED indication for Mode</li> <li>- Status</li> <li>- RSSI</li> </ul> <p>Sensor module :</p> <ul style="list-style-type: none"> <li>- LED indication for power</li> <li>- LED indication for input presence</li> </ul>
<b>Cable</b>	1ft long
<b>Operating Temperature</b>	<p>-20 °C~60 °C            4 °F~140 °F</p>
<b>Components</b>	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
<b>Operating Environment</b>	<p>Temperature : Min. -35° C – Max.80° C            Humidity: Min. 20% – Max. 80% (Non-Condensing)</p>
<b>LoRa (R) Radio Regional plans</b>	<ul style="list-style-type: none"> <li>- EU868 : 863~868Mhz                Max TX Power +14dBm                Duty Cycle 1%</li> <li>- US915: 903~915Mhz                Max TX Power +17dBm</li> <li>- AS923 : 920~925Mhz                Max TX Power +14dBm                Duty Cycle 1%</li> <li>- KR920 (Korea) : 922~923Mhz                Max TX Power +14dBm                Duty Cycle 1%</li> <li>- IL917 (Israel) : 915~917Mhz                Max TX Power +14dBm                Duty Cycle 1%</li> </ul>
<b>Certification</b>	FCC Part15C, CE EN300220-2
<b>Dimension</b>	76x77x120mm
<b>Mounting</b>	Wall hanging, DIN rail, Pipe Clamp
<b>Gateway sensor count</b>	7 (3 + 4)

**WTS-BATTMON - Technical Drawing**

