



# MagTap Wireless

APRS World, LLC specializes in data logging and control equipment primarily for the renewable energy industry. To learn more about this product or any of our other products, please visit us online at:

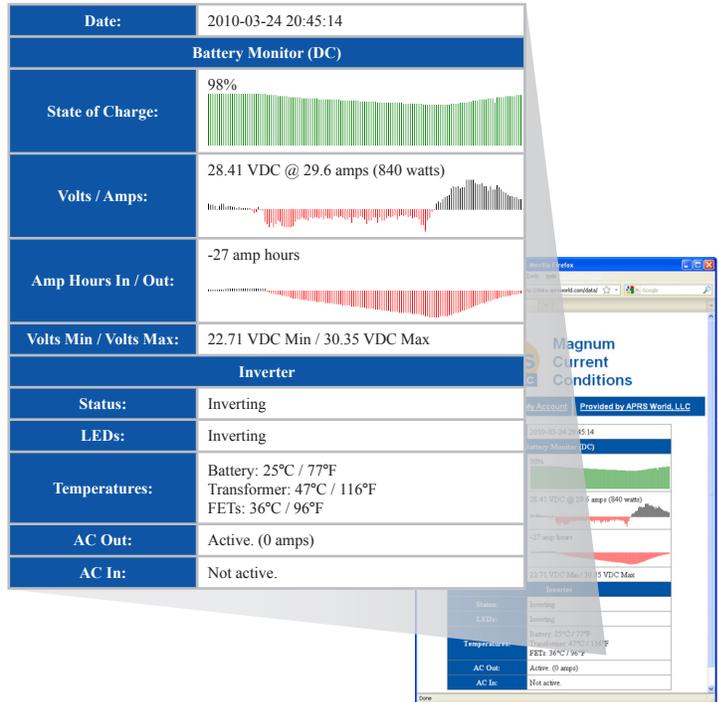
[www.aprsworld.com](http://www.aprsworld.com)

## Internet Based Monitoring for Magnum Brand Inverters and Accessories

APRS World's **MagTap** is a powerful and cost effective tool for remotely monitoring Magnum brand inverters and accessories. The MagTap installs on the Magnum network and provides live Internet monitoring of the inverter, battery monitor, and automatic generator start module. Using your always on Internet connection, the MagTap makes live and historical conditions available to you through a web browser and our WorldData service. **Requires APRS World's 802.15.4 to Ethernet gateway.**

### WorldData and Web Display

APRS World offers our World Data service for our customers (free for 5 years and only \$10 per year thereafter). Using an internet gateway module, our products can send live data to our hosted data service. Using your web browser you can view live and historical performance data and graphs. This allows your customer to see how their system is performing and allows you to troubleshoot the system without going on-site.



#### Includes:

- MagTap module
- Antenna
- AC Adapter
- .3m (1') Magnum Network Cable
- 2 x Mounting Screws

#### Measurements

- Status and faults
- AC and DC voltage, current, power, and frequency
- Temperatures
- Battery state of charge and amp/hours in and out
- Generator run time, temperature, status

#### Configuration

- Models and revisions of all connected devices
- Inverter configuration
- Battery size and type
- Charger amps and AC shore amps

Magnum authorized dealers qualify for a discount equal to their Magnum dealer discount. No other discounts are available.

#### MagTap Wireless

Part Number: APRS5810  
Shipping Weight: 0.45 kg / 1 lb  
RoHS: compliant  
MSRP: \$250.00

#### RF Modem to Ethernet Gateway, 802.15.4 XBee-PRO

Part Number: APRS7012  
Shipping Weight: 0.45 kg / 1 lb  
RoHS: compliant  
MSRP: \$250.00

Available from:

Or your  
Authorized  
Dealer:



+1-507-454-2727

[info@aprsworld.com](mailto:info@aprsworld.com)

## MagTap Communications Options

MagTap is available with two communication options: **Wireless 802.15.4** or **Wired Ethernet**. Use the guide below to choose the best option for your application. *An always-on internet connection is required for both options.*

Wireless 802.15.4	Wired Ethernet
<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>No cable to run to Internet router</li> <li>Multiple devices can send to one gateway</li> <li>MagTap can be 100' to 500' from Internet connection</li> <li>Gateway can go anywhere in range where there is a convenient Ethernet jack</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>Requires APRS World's 802.15.4 to Ethernet gateway</li> <li>May not be permitted in all areas of the world</li> </ul>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>No additional gateway required</li> <li>Works anywhere there is an Ethernet jack</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>Each APRS World device could require its own Ethernet port</li> <li>Requires an Ethernet jack at the MagTap</li> </ul>



## MagTap Wireless 802.15.4 Specifications

### Measurement Channels

**Note:** All measurements and information is provided by the Magnum equipment. The MagTap collects and transmits this information. Availability, accuracy and resolution of the measurements is dependent on the particular model(s) of Magnum equipment connected.

#### Inverter

Compatible with all Magnum inverters with remote interface. Not all models provide all measurement channels.

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|--|---|
| <ul style="list-style-type: none"> <li>Status</li> <li>Fault(s)</li> <li>DC Volts</li> <li>DC Amps</li> <li>AC Volts in and out</li> <li>AC Amps in and out</li> </ul> | <ul style="list-style-type: none"> <li>AC Frequency</li> <li>Invert and Charge LEDs</li> <li>Battery Temperature</li> <li>Transformer Temperature</li> <li>FET Temperature</li> </ul> |
|--|---|

#### Battery Monitor

Requires Magnum Remote, inverter, and battery monitor.

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|--|---|
| <ul style="list-style-type: none"> <li>State of Charge</li> <li>DC Volts</li> <li>DC Amps</li> </ul> | <ul style="list-style-type: none"> <li>DC Volts minimum and maximum</li> <li>Amp hours in and out</li> <li>Amp hour trip meter</li> </ul> |
|--|---|

#### Automatic Generator Start

Require Magnum Remote, inverter, and networked Automatic Generator Start.

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|---|--|
| <ul style="list-style-type: none"> <li>Status</li> <li>Temperature</li> <li>Generator run time</li> </ul> | <ul style="list-style-type: none"> <li>Volts</li> <li>Days since last run</li> </ul> |
|---|--|

#### Magnum Settings

Settings are from Magnum inverter and Magnum Remote.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>Inverter model and revision</li> <li>Inverter stack mode</li> <li>Inverter search watts</li> <li>Battery size and type</li> <li>Absorb time</li> <li>Remote revision</li> </ul> | <ul style="list-style-type: none"> <li>Low voltage (AC and DC) cutout</li> <li>Float and equalize voltages</li> <li>Charger amps &amp; AC shore amps</li> <li>Automatic Generator Start revision</li> <li>Battery Monitor revision</li> </ul> |
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### Sample Rate

- Fixed 30 second sample interval
- 2,800 measurements per day

### 802.15.4 XBee Wireless Communications

For use with APRS World's data.aprsworld.com service.

- 2.4 GHz, 63 mW (+18 dBm) for US version (91.5m [300'] indoor range, 1.6km [1 mile] outdoor range)
- 2.4 GHz, 10 mW (+10 dBm) for International version (61m [200'] indoor range, 762m [2,500'] outdoor range) (special order only)
- 2.4 GHz, 1 mW (+0 dBm) for low power version (30.5m [100'] indoor range, 91.5m [300'] outdoor range) (special order only)
- Direct Sequence Spread Spectrum (DSSS)
- RP-SMA connector and included rubber duck antenna
- Requires 802.15.4 XBee to Ethernet wireless gateway
- Agency Approvals:
  - United States (FCC Part 15.247)
  - Industry Canada (IC)
  - Europe (CE)
  - Japan
  - Australia

### Electrical, Mechanical, and Regulatory

#### Power

- 7 to 76 volts DC, reverse polarity protected
- Two position pluggable screw terminal for DC+ and DC-
- #1 flat screw driver required

#### Materials

- Case: ABS plastic, flame retardant, UL94V-0
- Circuit board: FR-4, 1.6mm (0.062 in), double sided, plated through holes, solder mask, silk screen, gold plated