Pole Mount Plug-in Form 2S 3-phase

BOOMERANG VOLTAGE, CURRENT AND POWER MONITORS

The Boomerang family of wireless power monitors extends your SCADA system to anywhere needed: a voltage regulator on a pole, the end of a distribution line, even a 120V receptacle. Every Boomerang includes an integrated cell modem with internal antenna for unobtrusive real-time voltage, current, and power monitoring from anywhere.

120V PLUG-IN

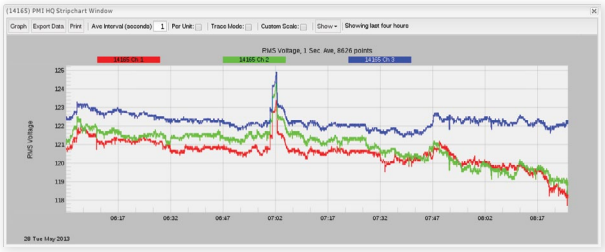
The world's first 120V receptacle SCADA voltage, current, and power sensor! The plug-in form factor is perfect for spot checks at troublesome locations, and for recloser and outage monitoring and notification. The integrated antenna and cell modem is much less intrusive than older, dial-up telephone plug-in monitors.

FORM 2S METER SOCKET

Standard pass-through Form 2S meter socket adapter, for single-phase applications. With no external antenna or ports, the low profile and unobtrusive Boomerang is perfect for residential locations, giving readings right at the point of common coupling.

3-PHASE STANDALONE

Pocket-sized, weatherproof form factor for 3-phase monitoring anywhere. The small size gives maximum flexibility for monitoring in almost any location.



POLE MOUNT

Single-phase or 3-phase Boomerang for power pole applications such as voltage regulator or capacitor bank measurements, or end of line monitoring. Rugged NEMA 4X enclosure includes terminal block and mounting feet for permanent installations.

Pole Mount

		120V PLUG-IN	FORM 2S	3 PHASE	POLE-MOUNT
VOLTAGE	Input range	80-140V RMS	80-300V RMS	80-300V RMS (600V with PoE)	80-300V RMS
	Accuracy	0.50%	0.50%	0.50%	0.50%
	Resolution	0.1V	0.1V	0.1V	0.1V
CURRENT	Measured Quantities	0-40A (15A continuous)	0-400A RMS total (200A per leg)	20, 200A w/ TLARS 100, 1000, 5000A w/ FCTs	20, 200A w/ TLARS 100, 1000, 5000A w/ FCTs
	Accuracy	1%	1%	1%	1%
POWER	Accuracy	1%	1%	1%	1%
COMMUNICATION	Standard	LTE modem	LTE modem	LTE modem	LTE modem
	Options	-	-	10/100 Ethernet, PoE (optional)	-
ENVIRONMENTAL	Temperature Range	Indoor Use Only	-22F to 130F	-22F to 130F	-22F to 130F
PHYSICAL DIMENSIONS	Size	4.9"L x 2.7"W x 1.25"H	6.75"W x 4.625"H	4.8"L x 3.35"W x 1.84"H	6.5"L x 6.5"W x 4.25"H
	Weight	0.5 lbs	3.6 lbs	less than 1 lb	3.6 lbs
	Case	-	NEMA 4X	NEMA 4X	NEMA 4X

BOOMERANG VOLTAGE, CURRENT AND POWER MONITORS

REAL-TIME DEMAND MANAGEMENT

A full-featured DNP3 interface is optimized for Demand Management and Conservation Voltage Reduction systems, including multiple configurable voltage thresholds, unsolicited report by exception and polled modes, and analog and binary points. Fine-tuned for use with low-cost telemetry data plans, the Boomerang DNP3 interface gives your SCADA system the true real-time data required for CVR systems, and ensures that regulatory limits are still being met.

FEATURES:

- Full DNP3 interface through TCP or UDP cell connection to SCADA systems
- Optimized for low cost telemetry data plans
- Low profile, unobtrusive form factors for any location
- Configurable voltage thresholds, user-defined settings
- Instant e-mail and SMS text alerts
- Flexible unsolicited report by exception triggers to work with any CVR/DMS system
- Analog DNP3 points for all measured quantities and modem signal strength

BOOMERANG AS AN OUTSTATION

The Boomerang voltage monitor has been designed with the capability to be a DNP3 outstation for a SCADA system. An outstation can collect various types of data for the SCADA system to utilize. It can also receive data from the master for settings such as thresholds, timing or scale factors. This data is arranged by object type and points within each type that details the specific pieces of data. For more on the object types and various points available with the Boomerang, click HERE to download the white paper: *An Overview of DNP3 and Boomerang Point Map.*

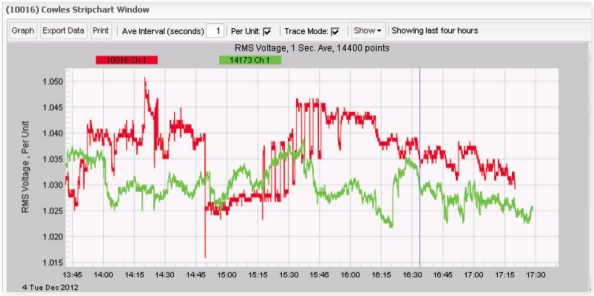
In addition to a full DNP3 interface, Boomerang voltage monitors interface with PMI's web-based database and data analysis package. The user can view voltage stripcharts, histograms and daily profile graphs for every data point that the device has ever registered to the PMI data warehouse. All historical voltage data is available in a web browser, accessible through powerful graphs and reports.

CONSERVATION VOLTAGE REDUCTION WITH THE BOOMERANG

The Boomerang is designed to work with any CVR system, providing accurate voltage telemetry and triggering in realtime via an embedded, wireless data connection. Conservation Voltage Reduction (CVR) is a method for lowering peak energy demand by lowering the average system voltage during the peak periods. The CVR concept is to tightly regulate the voltage delivered to customers, and to keep that voltage close to the regulatory minimum level. This greatly reduces the margin for voltage variations in the distribution system, and requires real-time measurement and control to adjust equipment in response to load shifts over time. A key decision is where to monitor for residential locations– at the meter base or transformer secondary? Advantages for the meter base are that the service voltage drop is included, and this is the point where the regulatory minimum voltage applies. Advantages for the transformer secondary are that installation is less disruptive (no outage to the customer), and voltage readings are more representative of distribution voltage. The Boomerang is available in meter base and pole-mounted versions (and even a 120V plug-in version), so the choice should be based on system model requirements and measurement goals. For more on CVR, be sure to download the white paper *Conservation Voltage Reduction with the Boomerang*, available HERE.

E-MAIL NOTIFICATION

Get real-time, on-the-spot notifications from devices in the field through e-mail (on a desktop, on a laptop or any mobile device), 24 hours a day, 7 days a week, all through a simple and intuitive online configuration.



POWERFUL GRAPHS AND REPORTS

Get support for printing and exporting graph data to a CSV file, even with multiple monitors selected at once, and a point trace table.

CHOOSING A CELL PLAN

Boomerangs can be provisioned on an LTE wireless network. Different plans are available to suite the variety of Boomerang configurations available. However, users are not limited to using Power Monitors' tiered pricing plan. To find out more, contact your PMI equipment representative at 800.296.4120.