

BOLT™



The Bolt is a versatile and affordable power quality recorder that can help find PQ complaint root causes and verify regulatory compliance. With its unique size and shape - you can easily investigate power quality complaint root causes in tight spaces, such as a meter base, cap bank, and other existing enclosures.



FIND PQ ROOT CAUSES

- Variable Frequency Drive problems
- Equipment shutdowns
- Flickering Lights
- Equipment damage
- Voltage Imbalance
- Under/Overtoltage

INVESTIGATE

- Measure voltage quality and load current characteristics
- Verify regulatory compliance
- Distributed generation testing and troubleshooting
- EV charging station studies

EASY TO USE

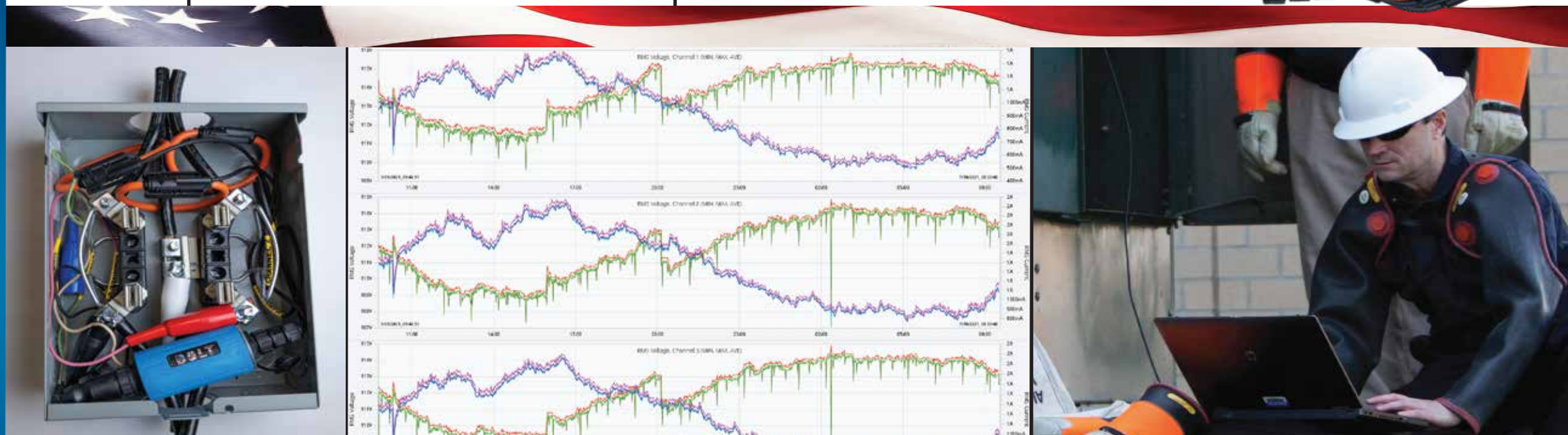
- Unique shape and CTs for small meter bases or cabinets
- Connect wirelessly to a smart phone, tablet, or laptop to view live data, download, or initialize
- Built-in WiFi and Bluetooth for access behind closed covers or from the ground
- LED-guided install to ensure proper hookup
- Weatherproof design for use outdoors

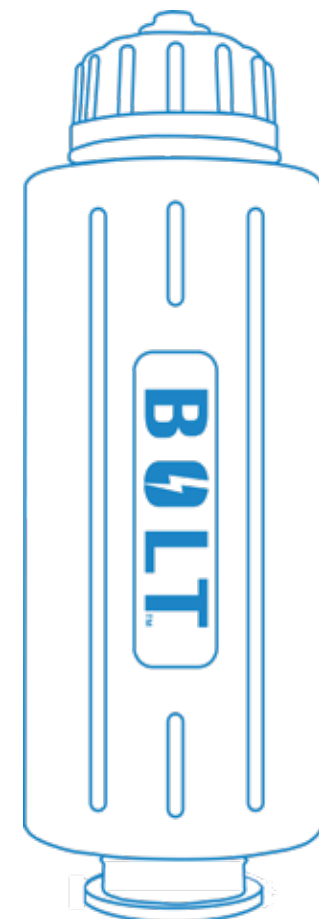
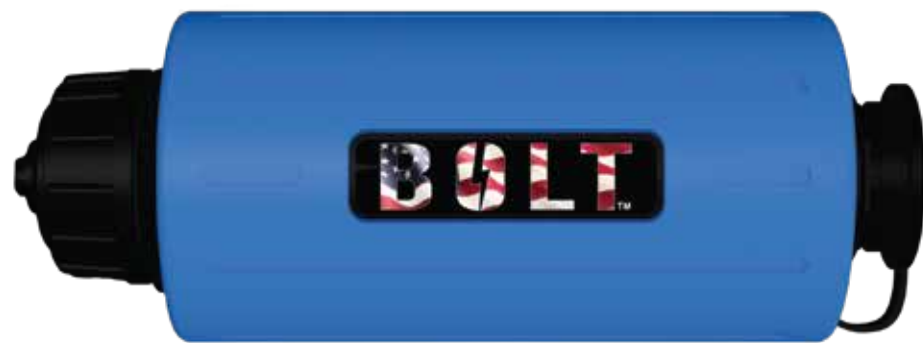


pmi®

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4.79"

1.78"



Features & Benefits

The Bolt is a small full-function power quality recorder. It can record up to 3 channels of AC voltage from 0-600 VAC, as well as 0-5,000 amps with current probes. It has the ability to record voltage and current harmonics to the 51st, and record all power functions. The Bolt power quality recorder is well-suited to record PQ data onsite.

Communication Options:

The Bolt features Wi-Fi, Bluetooth, and cellular connectivity for seamless access anywhere. Stream real-time data to your laptop or iOS device over Wi-Fi, even inside enclosures. Cellular communication ensures remote access when Wi-Fi isn't available, while USB allows quick downloads of stored PQ data.

Data Storage:

The Bolt features 128 MB of memory, making it a long term storage option for power quality data storage to download for detailed analysis.

Real-Time PQ Data:

Display waveforms and harmonic values for triggered events on all monitored channels, and view them in real-time wirelessly via Wi-Fi.

24/7 Technical Support

Call Us Anytime

Power Monitors, Inc. is an industry-leading product design and manufacturing firm based in Mt. Crawford, Virginia. Founded in 1987, PMI set out with the goal to solve power quality problems by listening to our customers and working with them to design and manufacture products to suit their needs. Total customer satisfaction is our goal: we offer 24/7 technical support and extensive educational material.

iOS

Manage PQ Recorders in the Field with your iOS Device

- Initialize a recorder directly from your iOS device
- Use live vector diagrams and RMS readings to ensure correct phasing and circuit type while on site

Real-time and Recorded Data from Your PMI Power Quality Devices

- View live waveforms, vector diagrams, harmonic bar charts, tabular meter data and more wirelessly using WiFi for real-time insight into PQ problems
- Download active recordings to your iOS device and perform on-site investigations by analyzing stripcharts, waveform captures, triggered events and more
- PMIVIEW becomes your hand-held front panel interface for your PMI Power Quality Device

Seamless Integration with PQ Canvass

- With PMIVIEW, users can quickly and easily upload all locally stored data to PQ Canvass for a more in-depth analysis
- Use PMIVIEW to geolocate your PMI PQ recorder using your iOS GPS location at install time



INPUTS AC Voltage 0 to 600 V RMS continuous per phase

AC Current 0 to 5000 A RMS
Sample Rate 15,360 samples/second
256 samples/cycle

CHANNELS Voltage 3 channels
Current 3 channels

MEASURED QUANTITIES PER CYCLE

RMS Voltage	Volts
RMS Current	Amps
Real Power	Watts
Apparent Power	VA
Reactive Power	VARs
Phase Angle	Degrees
Power Factor	Watts/VA
Displacement PF	cos (phase angle)
Power Usage	kWh, kVARh, kVAh

ACCURACY

Voltage	0.33% of full scale
Current	1.0% of full scale w/o probe
Power	1.0% of full scale w/o probe
Phase Angle	1.0° w/o probe
Power Factor	±0.02 w/o probe
Displacement PF	±0.02 w/o probe

POWER FAIL OPERATION 5 minutes with super capacitor ride through for recording

HARMONICS

Voltage	to the 51 st
Current	to the 51 st
Measures	Magnitude, phase, THD

SAFETY Designed to IEC 61010-1, 600 V CAT III

TIME SYNCHRONIZATION User-configurable SNTP time synchronization through WiFi.

COMMUNICATIONS Standard Options Wi-Fi, Bluetooth, USB
LTE Cell Modem

INFORMATION STORAGE Data Storage 128 MB onboard storage, unlimited cloud storage

RECORD SETTINGS

Interval Graphs	1 cycle to 4 hour interval, user selected, stop-when-full or wrap-around memory modes
Significant Change Flicker Settings	1 V to 8 V in 1 V steps User-defined, or conform to IEEE 1453/ IEC 61000-4-15, and IEEE Std. 141
Waveform Capture	Voltage and current threshold, periodic capture, waveshape, event cross triggers

POWER SUPPLY REQUIREMENTS

Voltage	60-600 VAC Channel 1 to Common (47-63-HZ)
Power Consumption	3 Watts max, 5 VA max at 600 V

ENVIRONMENTAL

Operating Temp	-20° F to +135° F
Humidity	Less than or equal to 85%
Shock	60 Hz to 2 kHz, acceleration 25 G
Vibration	10 Hz to 60 Hz, amplitude 1.8 mm
Max Altitude	2.0 km (6560 ft), derated above 2.0 km

PHYSICAL DIMENSIONS

Size	1.78" x 4.79"
Weight	less than 1 lb
Case	NEMA 4X