

Revolution™

Power Quality Recorder (600V/5000A Max)



Applications

- Office
- Industrial
- Commercial
- Distribution
- Transformers
- 3 Phase with neutral monitoring

Features & Benefits

• 600V CAT IV	Allows use in a wide range of monitoring environments
• Pocket-size	Can be installed inside meter bases, transformers, and panels
• Bluetooth® 2.0, cell phone modem (option) & Wi-Fi connection (option)	Stay safe with wireless data behind closed panel covers
• USB 2.0, built in Ethernet	Networking for permanent installations
• High sampling rate	Captures high speed transients up to 5000V
• Designed to UL 61010	Increased user safety
• Large memory capacity	Longer recording time and very high resolution wave capture

Revolution™

Power Quality Recorder

Inputs:

AC Voltage	0 to 600 RMS continuous per phase (5 kV peak transients)
AC Current	0 to 5000 amps
Sample Rate	1 MHz Voltage (16666 samples/cycle), 250 kHz current (4166 samples/cycle)

Channels:

Voltage	4 channels
Current	4 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:

The recorder can operate without any input voltage for up to 30 minutes. This allows it to record down to 0 volts on all channels during power outages.

Safety

IEC 61010-1, 600V CAT IV

Harmonics:

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

Communications:

Type, Standards	Bluetooth® 2.0 Wireless, USB 2.0
options	Mobile Phone, Wi-Fi

Information Storage:

Interval graph, waveform capture	128 MB (Standard), 512 MB or 1 GB (Optional)
Significant Change	1000 records
Flicker	1000 records

Record Settings:

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

Power Supply Requirements:

Voltage	60-600VA Channel 1 to Common (47-63Hz)
Power Consumption	5 Watts max

Environmental:

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

Physical Dimension:

Size	4.8" L x 3.35" W x 1.84" H
Weight	less than 1 lb
Case	NEMA 4X