PowerWatch

Voltage Disturbance Recorder

FEATURES

- Records essential voltage disturbance events:
  - Surges
  - Sags
  - Outages
  - Dropouts
  - Impulses
  - Frequency variations
- Records up to 4000 events
- 10-year battery life
- Safe, stand-alone operation
- No wires, alligator clips or other exposed wiring
- Hot-Neutral and Neutral-Ground monitoring

Front

Back

North America 120 Volt

Australia 240 Volt

United Kingdom 240 Volt

Continental Europe 240 Volt

Use the PowerWatch as your first line of defence against power quality problems. Simply plug it into any power receptacle (120-volt North American or 220/240-volt Australian, European or UK) and begin monitoring and recording essential voltage disturbance information - surges, sags, outages, impulses, dropouts, and frequency variations. Set up your pre-determined disturbance threshold values or use the industry standard default values using PowerWatch software. No wiring or dangerous connections are required.

PRODUCT SPECIFICATIONS

Size:
85 mm x 68 mm x 35 mm (3.35" x 2.65" x 1.35")
Weight:
120 g (4 oz)
Case Material:
Noryl® plastic
Operating Limits:
-40 to 70°C (-40 to 158°F) and 0 to 95% RH (non-condensing)
Battery:
3.6 volt Lithium
Battery Life:
10 years under normal use (factory replaceable)
Fuse:
1/16A fast-blow (non-replaceable)
Memory Size:
32KB (4,000 events)
Storage Method:
First-in, First-out or Fill-then-stop
Sampling Method:
Continuous (half cycle integrated)
Alarm Type:
Optical (flashing red LED)
PC Requirements:
PC running Windows 2000 SP4, Windows XP SP1 or Windows Vista 32 bit. PC must have one free serial or USB port depending on connection.
Software Requirements:
PowerWatch Software (required, see page 32 for details)
Certifications:
CSA, NRTL/C, and UL3111-1

MEASUREMENT SPECIFICATIONS:

Surge, Sag & Outage (120-volt version):

	Hot to Neutral	Neutral to Ground
Range:	0 to 200 V rms	3 to 200 V rms
Accuracy:	+/- 1 V rms + resolution	+/- 1 V rms + resolution
Resolution:	1 V rms	1 V rms

Surge, Sag & Outage (220/240-volt version):

	Hot to Neutral	Neutral to Ground
Range:	0 to 400 V rms	3 to 200 V rms
Accuracy:	+/- 2 V rms + resolution	+/- 1 V rms + resolution
Resolution:	2 V rms	1 V rms

Impulse:

	Hot to Neutral	Neutral to Ground
Range:	100 to 2500 V peak	50 to 2500 V peak
Accuracy:	+/- 10% of reading + resolution	+/- 10% of reading + resolution
Resolution:	10 V	10 V
Width Detection:	1 µsec minimum	1 µsec minimum
Phase Angle:		
Accuracy:	+/- 1° (20 to 180°, 200 to 360°)	+/- 1° (20 to 180°, 200 to 360°)
Resolution:	1°	1°

Frequency:

Range:	45 to 65 Hz
Accuracy:	+/- 0.1 Hz (3 cycles minimum)
Resolution:	0.1 Hz

Time:

	Hot to Neutral	Neutral to Ground
Events (< 1 sec):		
Accuracy:	+/- 0.5 cycle	+/- 1 cycle
Resolution:	0.5 cycle	1 cycle
Time-stamp (> 1 sec):		
Accuracy:	+/- 2 sec/day + resolution	
Resolution:	8 seconds	

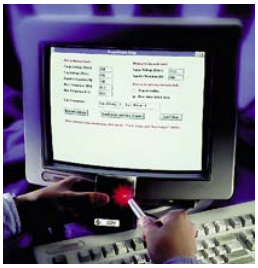
Order Information

MODEL	COMPATIBILITY	CATALOG #
PWV-001	North America	01-0066
PWV-002-A	Australia	01-0205
PWV-002-U	United Kingdom	01-0200
PWV-002-E	Europe	01-0215

PowerWatch Software

For PowerWatch Voltage Disturbance Recorder

Compatible with Windows® 2000 SP4, XP SP3 and Vista 32 bit



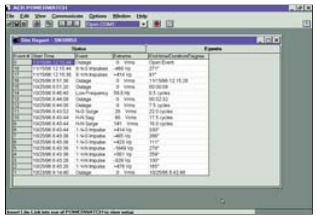
Easy setup and downloading

This powerful and easy-to-use power quality analysis software program is developed exclusively for ACR's voltage disturbance recorder, the PowerWatch. With no programming hassles or complex menus, setup and downloading occurs in seconds. Connection is simple: plug the optical interface cable (LIC-101 cable) into the serial port of your computer and point the other end to the optical port on the PowerWatch. Communication begins immediately. Detailed site reports are displayed for every voltage disturbance event recorded including:

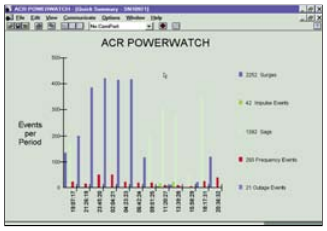
- Hot-to-Neutral and/or Neutral-to-Ground Surges
- Hot-to-Neutral and/or Neutral-to-Ground Sags
- Hot-to-Neutral and/or Neutral-to-Ground Impulses
- Outages
- Frequency Variations

With the Quick Summary option, all events are summarized and displayed individually in a bar graph format. This helps determine power quality trends quickly and effectively. The Event Distribution Graph plots the magnitude of events against duration on a logarithmic scale, allowing you to determine the importance of the data (a single random event may not be as important as a cluster of events). The Event Distribution Graph also helps determine what kind of power quality problems you have as all 4000 events can be plotted on this graph. You have the choice of analyzing hot-to-neutral or neutral-to-ground events or showing both in different colors. The CBEMA Curve can be used to determine the importance of each event.

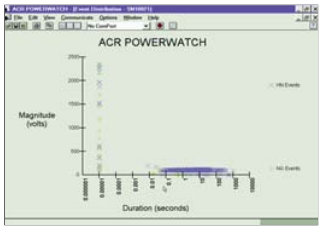
Detailed Site Reports



Quick Summary



Event Distribution Graph



Order Information

MODEL	DESCRIPTION	CATALOG #
PWV-100-USB	PowerWatch Interface Package* (USB)	01-0231
PWV-100	PowerWatch Interface Package* (Serial)	01-0060
PW	PowerWatch Software - Full Install	34-0004

**Includes software on CD, interface cable, and manual*

FEATURES

- Simple and easy to use
- User-selectable threshold limits
- Detailed site reports
- Hot-to-neutral and neutral-to-ground readings
- Quick summary option
- Determine event importance