



## PowerWatch 120V

### Voltage Disturbance Recorder - North America

PowerWatch 120V is the easiest way to monitor and record essential voltage disturbance information from any North American Power receptacle. Just set up your pre-determined disturbance threshold values or use the industry standard default values and plug it in. No wiring or dangerous connections required.

#### APPLICATIONS

Auditing medical instrumentation, point-of-sale terminals, computer servers, and other sensitive electronic equipment.

#### GENERAL SPECIFICATIONS

|                        |   |
|------------------------|---|
| Size:                  | 85mm x 68mm x 35mm (3.35" x 2.65" x 1.35")  |
| Weight:                | 120 g (4.00 oz)   |
| Case Material:         | Noryl® Plastic  |
| Battery:               | 3.6 volt Lithium, 1 Amp-Hour  |
| Fuse:                  | 1/16A fast-blow (Non-replaceable)   |
| Clock Accuracy:        | ± 2 seconds per day   |
| Memory Size:           | 32 KB (4,000 events)  |
| Sampling Methods:      | Continuous (First-in First-out), Stop When Full (Fill-then-stop)                                    |
| Operating Limits:      | -40°C to 70°C (-40°F to 158°F) and 0 to 95% RH (non-condensing)                                     |
| Alarm Type:            | Optical (flashing red LED)  |
| Certifications:        | CSA: NRTL/C; UL3111-1   |
| Event Types Detected:  | Surges, sags, impulses, dropouts, outages, and frequency variations                                 |
| Measurement Locations: | Hot to Neutral and Neutral to Ground  |
| PC Requirements:       | Windows PC with at least one free USB or serial port (depending on interface)                       |
| Software Requirements: | EventReader Software (Compatible with Windows XP, Vista, Windows 7 and Windows 8 [32 bit & 64 bit]) |



#### MEASUREMENT SPECIFICATIONS

##### Surge, Sag & Outage

|             |                      |
|-------------|----------------------|
| Range:      | 0 to 200V rms        |
| Accuracy:   | ±1V rms + resolution |
| Resolution: | 1V rms               |

##### Hot to Neutral

|             |                      |
|-------------|----------------------|
| Range:      | 0 to 200V rms        |
| Accuracy:   | ±1V rms + resolution |
| Resolution: | 1V rms               |

##### Neutral to Ground

|             |                      |
|-------------|----------------------|
| Range:      | 3 to 200V rms        |
| Accuracy:   | ±1V rms + resolution |
| Resolution: | 1V rms               |

##### Impulse

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

##### Hot to Neutral

|                  |                              |
|------------------|------------------------------|
| Range:           | 100 to 2500V peak            |
| Accuracy:        | ±10% of reading + resolution |
| Resolution:      | 10V                          |
| Width Detection: | 1 µsec minimum               |

##### Neutral to Ground

|                  |                              |
|------------------|------------------------------|
| Range:           | 50 to 2500V peak             |
| Accuracy:        | ±10% of reading + resolution |
| Resolution:      | 10V                          |
| Width Detection: | 1 µsec minimum               |

##### Frequency

|             |                            |
|-------------|----------------------------|
| Range:      | 45 to 65 Hz                |
| Accuracy:   | ±0.1 Hz (3 cycles minimum) |
| Resolution: | 0.1 Hz                     |

##### Time

|                        |                             |
|------------------------|-----------------------------|
| Events (<1 second)     |                             |
| Accuracy:              | ±0.5 cycle                  |
| Resolution:            | 0.5 cycle                   |
| Time Stamp (>1 second) |                             |
| Accuracy:              | ±2 seconds/day + resolution |
| Resolution:            | 8 seconds                   |

##### Hot to Neutral

|             |            |
|-------------|------------|
| Accuracy:   | ±0.5 cycle |
| Resolution: | 0.5 cycle  |

##### Neutral to Ground

|             |           |
|-------------|-----------|
| Accuracy:   | ±1 cycle  |
| Resolution: | 0.5 cycle |

#### ORDERING INFORMATION

ISO 9001 Certified  
ISO9000\SPECIFICATIONS\POWERWATCH120V.pdf

##### Item

PWV-001 (PowerWatch 120V NA VDR Only)  
Special PowerWatch Bundle: PWV-001 PowerWatch  
120V NA VDR, LIC-102 USB Cable, EventReader Software

##### Cat#:

01-0066  
01-0069

Rev:6 - 10/29/12

