## PROVEN DATA LOGGING SOLUTIONS

ACR Application Document



# Diagnose Your UPS (Uninterruptible Power Supply) Efficiency

Companies are increasingly reliant on the integrity of electrical and electronic equipment to ensure the continuity of their business processes; loss of production time means a reduction in the profit margin. The Uninterruptible Power Supply (UPS) is purported as the best protection against AC power disturbances and outages; reducing the risk of losing valuable data or damaging hardware and equipment. The fact is, UPS reliability is not 100% and companies have a false sense of security that their critical computers, equipment and assets are safeguarded.

## **Challenges:**

#### Not all UPS equipment is created equal

There are three main types of UPS: Off-Line, Line-Interactive and On-Line Double Conversion. Each has its merits and disadvantages, but what is really important is that your UPS is doing the job you've been told it will do. How do you know your UPS is providing an uninterrupted supply of good quality power to your critical equipment?

#### UPS equipment can fail

Although a UPS is supposed to protect your computer from disaster, it is also a single source of failure. If any part of a UPS breaks down, you may lose your power protection and your work should the UPS fail entirely. How can you protect your critical equipment when the ingress of power pollutants could cause degradation and damage to your UPS?

## Solution:

Protect mission critical equipment by testing your power quality - both the main power and the output UPS power. ACR's PowerWatch is a self-contained and portable voltage disturbance recorder that plugs into a standard 120V power outlet. This device records surges, sags, impulses, dropouts, outages and frequency variations - all power pollutants that may be harmful to your UPS and continuous supply of good quality power. With no wires, ACR's PowerWatch can be easily deployed in all environments. A 10-year internal battery ensures long life and continuous operation. Powerful and easy to use software displays thousands of events; quickly and accurately validating the state of the UPS performance and power.

Ignore UPS power related problems and you will eventually suffer from disruption - degradation and/or destruction.



### Deploying the data logger and downloading the information is easy:

- 1. Plug it into any power receptacle (120V)
- 2. Red indicator light will flash when an event has occurred
- 3. Download the logged events to your PC
- 4. View and analyze your detailed event reports: Detailed and Single Event Site Reports, Statistical Analysis, and Event Distribution Graph







Detailed and Single Event Site Reports

Statistical Analysis

Event Distribution Graph

## **Specifications for PowerWatch:**

Memory Size:	32 K, 4000 Events	
Storage Method:	First-in, First-out or Fill-then-stop	
Sampling Method:	Continuous (half cycle integrated)	
Alarm Type:	Optical; Flashing red LED	
Battery:	3.6 Volt Lithium (10-year warranty)	
Operating Limits:	-40 C to 70 C (-40 F to 158 F) and 0 to 95% RD (non-condensing)	
Measurement Locations:	Hot to Neutral and Neutral to Ground	
Plug Configurations:	North America (120 Volt), Australia (240 Volt), United Kingdom (240 Volt)	

## **Ordering Info:**

Equipment	Description	Catalog #
PowerWatch V-001	North America	01-0066
PowerWatch V-002-A	Austrialia	01-0205
PowerWatch V-002-U	United Kingdom	01-0200
PowerWatch V-002-E	Europe	01-0215
PowerWatch V-100	PowerWatch Interface Package*	01-0060
PowerWatch	PowerWatch Software-Full Install	34-0004

\*Includes software, interface cable and manual

