

# PowerVisa

## Measurement Parameters

(4) differential inputs, 1-600Vrms, AC/DC, 0.1% rdg + 0.05% FS, 256 samples/cycle, 16 bit ADC

(4) inputs with CTs 1-6000 Arms, CT-dependent, AC/DC, 256 samples/cycle, 0.1% rdg + CTs, 16 bit ADC

Frequency range, 10 mHz resolution, 45-65 Hz

Phase Lock Loop - Standard PQ Mode

## Monitoring Compliance

IEEE 1159, IEEE 519, MIL STD 1399, MIL STD 704

IEC 61000-4-30 Class A

EN50160 Quality of Supply

Long Term Monitoring w/min/max/avg

Continuous Data Logging

MIL STD 1399, MIL STD 704F

## Power Quality Triggers

Cycle-by-cycle analysis

256 samples /cycle; 1/2 cycle RMS steps

L-L, L-N, N-G RMS Variations; Sags/swells/interruptions

RMS Recordings V & I  
(30 pre-fault, 100 post fault cycles)

Waveshape Recordings V & I  
(30 pre-event, 100 post-event cycles)

Low and Medium Frequency Transients - V & I

Harmonic Summary Parameters

Cross trigger V & I channels

RMS Event Characterization (IEEE and IEC)

## Distortion/Power/Energy

W, VA, VAR, TPF, DPF, Demand, Energy, etc.

Harmonics/Interharmonics per IEC 61000-4-7, IEEE 519

THD/Harmonic Spectrum (V,I,W) to 63rd

Flicker per IEC 61000-4-15 (Pst,Plt,Sliding Pit)

Crest Factor, K Factor, Transformer Derating Factor,  
Telephone Interference Factor

## Available Languages

English, Simplified Chinese, Traditional Chinese,  
Finnish, French, German, Italian, Korean, Spanish,  
Swedish, Thai

## General Specifications

Size (HxWxD): 12" x 2.5" x 8" (30cm x 6.4cm x 20.3cm)

Weight: 3.8 pounds (1.8 kg)

Operating Temperature: 32° to 122° F (0° to 50° C)

Storage Temperature: -20° to 55° C (4° to 131° F)

Humidity: 10% to 90% non-condensing

System Time Clock: Crystal controlled, 1 second resolution

Charger/Battery Eliminator: 90-264 VAC 47-63 Hz

Display: LCD color touch screen

Memory options: 4 gigabyte removable compact flashcard

## Optional Accessories

### Current Probes:

Model TR-2510B - 0.1-10A; up to 0.47" conductors

Model TR-2500B - 10-500 A; up to 1/8" diameter or  
2.5" x 0.2" conductors

Model TR-2520B - 300-3000 A; up to 2.56" " diameter  
1.97" x 5.3 (bus bar)

Flexible probes ranging in current from 3-300A,  
6", 8", 12"

Flexible probes: ranging in current from 30-6000A,  
24", 36", 48"

Hall Effect Probes for AC/DC applications, 150A or 1500A

CT Cable Adapter (CA4300LEM)

Voltage Cable Accessory Pack (VCP4300)

Soft Carrying Case (SCC-4300)

Field Replaceable Battery Pack (BP-PX5)

Reusable Shipping Container (RSC-PX5)

Weather Resistant Container (ENCL-HH)

Lockable Portable Case (LPC-4300)

Communications Interface:

RS232 FiberOptic Adapter (COMM-RS232)

USB FiberOptic Adapter (COMM-OUA)

Lan-Fiber Optic Adapter (COMM-OEA)

DRAN-VIEW software: Runs under Windows 7, XP, 98, ME,  
and NT

NodeLink® to communicate and download the instruments  
data

CD-ROM Training Program



THE STANDARD FOR ENERGY & POWER MEASUREMENT

# PowerVisa

## Power Quality Analyzer



Advanced, Accurate & Automated

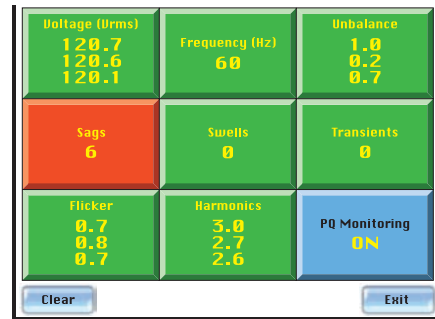


Contact:  
Industrial Process Measurement, Inc.  
3910 Park Avenue, Unit 7  
Edison, NJ 08820  
732-632-6400  
support@instrumentation2000.com  
<http://www.instrumentation2000.com>

A  
GOSSEN METRAWATT  
Company

## Troubleshooting

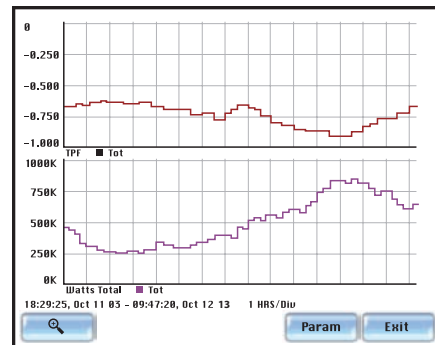
The PowerVisa's unique annunciator "report card" provides instant power quality feedback or notifications in the field, as well as feedback on the instrument settings. A wide range of power monitoring data is collected, analyzed and presented in color coded categories



to quickly identify areas of concern, which are identified in red. Drill down for more detailed information by simply touching the intuitive graphical screen to troubleshoot problems, locate the source and pinpoint the root cause of power quality disturbances.

## Energy Surveys

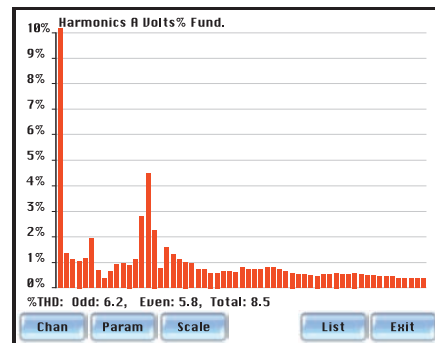
The cost of energy is often a facility's largest operating expense. Reducing energy consumption during peak times, shifting loads, purchasing energy efficient equipment, or changing energy suppliers can save 10-40% annually. The PowerVisa is an invaluable tool for performing energy surveys, including monitoring energy consumption, usage patterns, peak demands and the activation of large loads to reduce electricity costs.



Plus, the PowerVisa makes it easy to track and allocate energy costs by process or department.

## Harmonics

As the sensitivity of power electronics increases, equipment ranging from HVAC systems, personal computers and copiers to computerized processed equipment and manufacturing systems are susceptible to harmonic pollution. In some cases, harmonics will cause small, almost imperceptible variations in performance that can aggregate and cause significant long-term damage.



Current harmonics generated by a source can pollute the entire power system. The PowerVisa captures detailed harmonics, interharmonics and subharmonics to effectively troubleshoot the complex problems caused by these events.

# PowerVisa

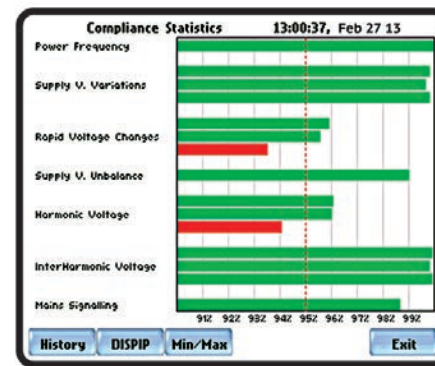
## Power Quality Analyzer

*Equipped with 8 independent channels, color touch screen and lightweight design, the 3-phase PowerVisa is an advanced, yet affordable Power Quality, Demand and Energy monitoring instrument. Automated setups provide instant detection of circuits and configurations, ensuring that the instrument is ready to successfully collect data. Users can select the length and mode of data collection, including troubleshooting, data logging, power quality surveys, energy and load balancing. The PowerVisa collects data at 256 samples/cycle/channel, offers remote communications using RS-232, Ethernet or USB options, and meets IEEE 1159, IEC 6100-4-30 Class A and EN50160 standards.*



## Compliance Monitoring

The PowerVisa has been designed to meet the most advanced power quality standards, including IEEE 1159, IEC 61000-4-30 Class A and EN50160. A statistical output is produced to quickly verify compliance with international quality-of-supply standards and to benchmark power quality. In an instant, the PowerVisa provides a snapshot of over 13 key parameters, including unbalanced voltage variations and harmonics.

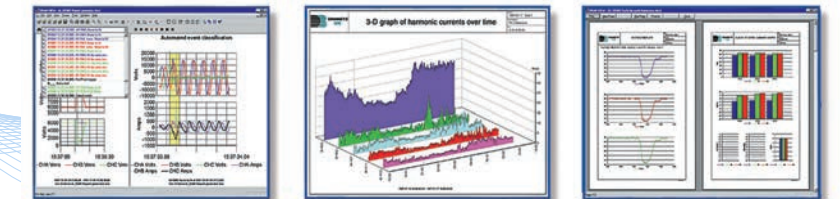


## User Interface

The user friendly 1/4 VGA touchscreen has colorful icons for major instrument functions, such as viewing data in real time, reports, timelines and instrument configurations. With the touch of your finger or a stylus you can view data and zoom-in on captured disturbances for more detail and automated event characterization. The PowerVisa automatically detects the circuit type, voltage and current being monitored and also has monitoring modes that are pre-programmed for major applications to make custom programming simple. Data is captured on a compact flash memory card for analysis, trending, visualization and reporting directly on the local LCD display, or for use with our industry leading DRAN-VIEW® software. DRAN-VIEW makes it simple to trend events, correlate data, analyze worst-case scenarios, simultaneously view data from multiple sites, generate standard reports, custom reports and understand complex issues, such as transients, harmonics and interharmonics.

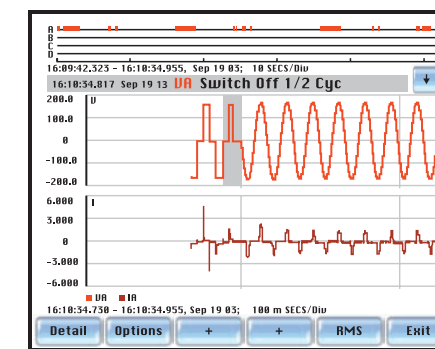
## Dran-View 6

The PowerVisa performance is enhanced by Dran-View® 6, a Windows-based software package that enables power professionals to simply and quickly visualize and analyze power monitoring data. It is easy to navigate, delivers automated functionality and incorporates powerful analytical capabilities with customizable options to meet the needs of each individual user. Dran-View is successfully used by thousands of customers around the world and is the industry leading power management software tool.



## Equipment Performance Testing

Determining the availability and compatibility of facility power prior to the installation of new equipment is simplified using the PowerVisa. The instrument incorporates advanced features such as RMS Triggers, low/medium frequency transients and cross triggering between channels to demonstrate that power mitigation devices such as UPS's and stand-by generators are operating properly.



Real time readings observed during maintenance and startup processes enable users to see results and tweak that equipment during the testing process.