

PowerMonic

Power Monitoring & Event Recording

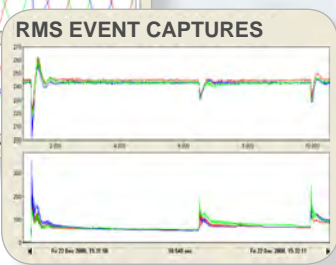
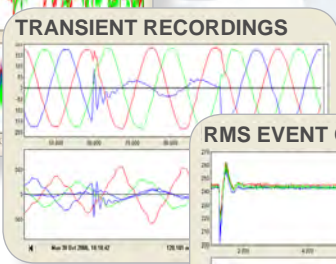
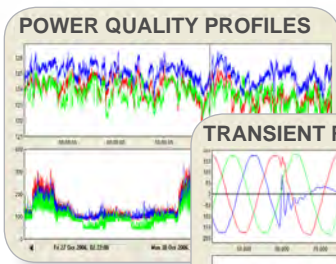
PM45



- Voltage Investigations
- Power Profiling
- Harmonic and Inter-Harmonic Analysis
- Power Factor Studies
- Flicker and Imbalance Calculations

Key differentiating features of the PowerMonic PM45 include:

- 600V-Certified IEC61010 Category IV personnel safety rating
- Self-recognizing clamp-on or flex-CT current sensors
- User-programmable display for instant, no-PC readings
- Best-in-class 15MB flash memory for long term recording
- Most competitive price in the industry



PowerMonic PM45

Power Monitoring & Event Recording

PowerView Software

Incorporating ten years of enhancements, PowerView is a best-in-class software interface for configuration, downloading, analysis of data, graphing and report creation.

Setup

- Step-by-step configuration wizard
- Create and save configuration templates
- Auto-detection of current and voltage probes
- Fixed or sliding scale current and voltage thresholds
- User-defined memory management

Installation

- Four channels of voltage and current
- Powered by A-phase voltage or wall receptacle
- Auto or delayed start options
- Online user-configured LCD display

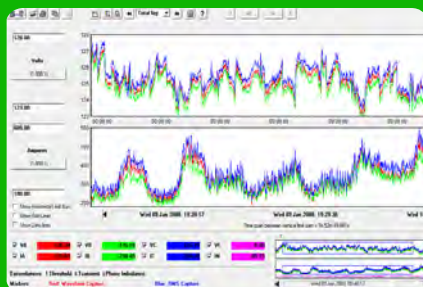
Analysis Tools

- Power meter and voltage charts
- Daily, average and minimum/maximum tables
- Waveform and RMS event graphing
- Harmonic, inter-harmonic & flicker charts
- Export to CSV for importing to a spreadsheet
- Energy calculations

Software Screenshots



Configuration Screen



Voltage Analysis



Specifications

Measurement

Samples Per Cycle	204@50Hz, 170@60Hz
Sample Rate	PPL Synchronized (IEC61000-4-7)
Memory	15MB Internal Flash Memory
Power Meter	V, A, Min/Max, Freq, TPF, DPF, kV, kVA, kVAR
Total Harmonic Distortion	IEC61000-4-7 (THD-F & THD-R)
Harmonics	IEC61000-4-7 (Up to 48th Magnitude & Angle)
Interharmonics	IEC61000-4-7 (Up to 48th)
Flicker (Pst & Plt)	IEC61000-4-15 (10min Pst and 2hr Plt)
Voltage & Current Umbalance	IEC61000-4-30
Instrument Type	Class B (IEC 61000-4-30)
Frequency Range	50Hz nominal (42.5-57.5Hz) 60Hz nominal (51.0-69.0Hz)

High Speed Event Recording

	User defined Rolling and/or Threshold Voltage and Current & Transient Triggers
Table Capture (Sags/Swells)	Half Cycle, Min/Max & Duration
RMS Snapshot	Half Cycle, 5s - 30s duration
Waveform Snapshot	Sample rate for 400ms duration

	Voltage	Current
Input Channels	4 Isolated channels	4 Channels
Measurement Range	A, B & C channels 0-600 VAC Vgnd 0 - 60 VAC (±1% reading ±1 Isd)	0-3000 Amps
Input Range	0-600VAC (660VAC absolute)	0-440mV at 10K Ohms
Instrument Accuracy	0.4% readings + 1 Isd	0.4% readings + 1 Isd
System Accuracy	0.4% readings + 1 Isd	1% readings + 1 Isd
Resolution Logged Data	0.001 Volt	0.001 Amp
Resolution LCD Display	0.1 Volt	0.1 Amp

Circuit Connections

Three Phase Wye/Delta, Open/2-Element Delta, Split Phase & Single Phase

Current Probe Options

C10* (0-10A), C100S* (10-125A), C500* (25-600A), Flexi F3000-6 (150-3600A) * Not CATIV-600V Rated

Communications

Direct Connection USB Serial Cable
Remote Connection Cellular (GPRS/3G/CDMA)

Mechanical & Power

Power Source - Main	60-600 VAC from Phase A, and USB powered for configuration and downloading
Power Source - Backup	6V 0.5Ah Rechargeable sealed lead acid battery
Power Consumption	10W typical (from Phase A)
Display	Graphic LCD 128 x 64 bits (0.1 resolution)
Real-Time-Clock	3V 950mAh Li-Manganese Dioxide/Organic Electrolyte
Dimensions	230mm/9.1" (l) x 120mm/4.72" (w) x 90mm/3.6" (d)
Weight	7lbs (3kg) instrument only

Environmental & Safety

Temperature Range	-20°C (-4°F) to +60°C (+130°F)
Humidity	20% to 99% Relative Humidity
Protection Class	IP65 (all weather housing)
Protection Levels	IEC 61010-1 2001 Pollution Degree 3 Measurement Category IV-600V

PowerMonic Accessories



Flexible Current Probes



Clip-on* Current Probes



CATIV-600V Voltage Clamp



Single Phase Power Cable



Small Current Clamp*

* Not CATIV-600V Rated

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