

PowerMonic

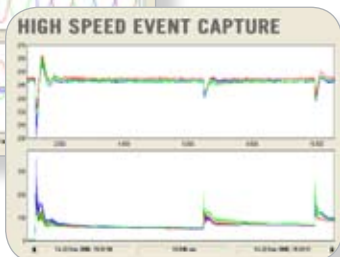
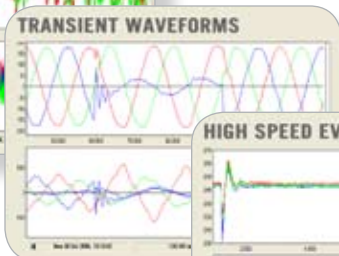
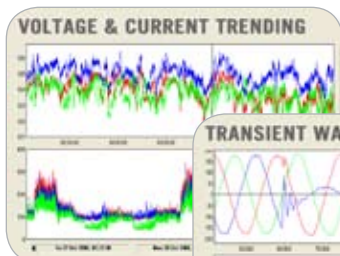
Portable Power Monitoring

PM30/40

Power Quality Analyzer
& Event Recorder

- Voltage Investigations
- Troubleshooting
- Harmonic Analysis
- Power Factor Surveys
- Load Studies

The PowerMonic range of portable recorders offers effective, reliable and versatile monitoring of low voltage circuits. The high performance rugged PowerMonic is a workhorse instrument for conducting power quality and supply compliance studies, equipment operation analyses, power flow and power factor assessments and load surveys, as well as troubleshooting and locating hard-to-find intermittent faults.



Features

- ✓ Waterproof
- ✓ Rugged Field Design
- ✓ Self-Powered
- ✓ Easy to Use

GridSense™

T&D Solutions Since 1974

PowerMonic PM30/40

Portable Power Monitoring

The PowerMonic series of portable power quality recorders caters to a wide range of utility and industrial monitoring applications. The high powered, robust, easy to use and practical instrument provides convenient and accurate information on the performance and condition of low voltage networks.

The compact design allows for easy and quick installation for short and long term monitoring applications. Simultaneously logging Power Quality and Power Flow parameters the PowerMonic also independently captures high speed event snapshots to help uncover

intermittent, potentially harmful and hard-to-find power quality issues. Typical installations include, but are not limited to, **Pad Mount** and **Pole Mount Transformers, Capacitor Banks, Regulators, Substations, and Commercial, Residential and Industrial** connection points.

The PowerMonic Portable Power Quality Analyzers are a proven, versatile and reliable everyday instrument used by **System Planners, Distribution Engineers, Electrical Engineers, Electrical Contractors, Power Quality Engineers, and Maintenance Engineers** for troubleshooting and analyzing low voltage networks.



The PowerMonic is Easy as 1, 2, 3...



1. Configuration:

Simply Pick, Apply and Install. Choose from an extensive list of predefined configurations accommodating a wide range of connections or customize to suit a specific investigation. The configurable options include:

- ✓ Simple user defined log parameters
- ✓ Independent High Speed Event Capture settings
- ✓ Memory Management
- ✓ Different Start / Stop log options

The powerful memory management tool allows the user to allocate memory independently for events and data, thereby maximizing overall recording time.



2. Installation:

The PowerMonic's tamperproof and rugged housing is well suited for indoor and outdoor single, split and three-phase installations.

The PowerMonic features an easy plug and play set up for immediate use; on connection it automatically detects, scales and starts recording. The instrument is powered by the measured voltage, ideal for short and long-term monitoring without worrying about battery life or an auxiliary power supply. Real-time measurements and log and memory status are clearly displayed on the LCD panel. An internal, rechargeable backup battery provides ride through recording capabilities and the non-volatile memory guarantees data retention during sustained outages. The logged data is easily downloaded to a PC using either a direct or remote connection.



3. Data Analysis:

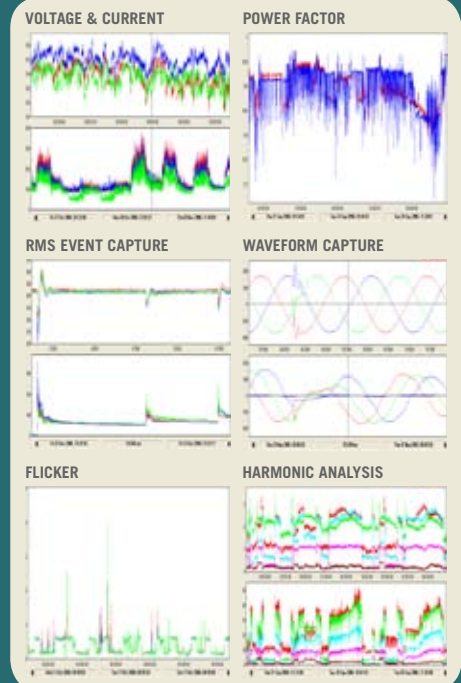
PowerView incorporates over 10-years experience and user feedback and is recognized as the

best in class software package. PowerView features powerful viewing and reporting tools with a simple, clean, intuitive and easy-to-use interface for quick data and root cause analysis.

- ✓ Included with PowerMonic
- ✓ Unlimited installations
- ✓ Free updates, web training and support

Technical Specifications

Measurement	PM30	PM40
Samples Per Cycle	228@50Hz, 190@60Hz	204@50Hz, 170@60Hz
Sample Rate	11413Hz, fixed	PPL Synchronized
Memory	4MB Internal flash	15MB Internal, 512MB SD Card
Logged Parameters	V, A, Min/Max, Freq, TPF, DPF	V, A, Min/Max, Freq, TPF, DPF, kV, kVA, kVAR
Calculated Parameters	kV, kVA, kVAR	None
Total Harmonic Distortion	Yes	IEC61000-4-7 (THD-F & THD-R)
Harmonics (Magnitude & Angle)	Up to 48th	IEC61000-4-7 (Up to 48th)
Interharmonics	No	IEC61000-4-7 (Up to 48th)
Flicker (Pst & Plt)	No	IEC61000-4-15 (10min Pst and 2hr Plt)
Voltage & Current Unbalance	No	IEC61000-4-30
High Speed Event Recording		
Table Capture (Sags/Swells)	Half Cycle, Min/Max & Duration	Half Cycle, Min/Max & Duration
RMS Snapshot	Half Cycle, 13s duration	Half Cycle, 5s - 30s duration
Waveform Snapshot	Sample rate, 120ms duration	Sample rate, 400ms duration
Display	LCD, 2-rows x 16 characters	Graphic LCD 128 x 64 bits
Communications	RS232 (115Kbps)	USB1.1 (Local) & RS232 (Remote)
General Specifications	Voltage	Current
Input Channels	3 (isolated)	4
Measurement Range	55-520 VAC	0-3000 Amps
Input Range	55-520 VAC (600V RMS isolation)	0-440mV at 10K Ohms
Instrument Accuracy	0.4% readings + 1 lsd	0.4% readings + 1 lsd
System Accuracy	0.4% readings + 1 lsd	1% readings + 1 lsd (0.5M CT)
Resolution Data/LCD Display	0.001 Volt/ 0.1 Volt	0.001 Amp/ 0.1 Amp
Instrument Type	Class B (IEC 61000-4-30)	
Frequency Range	50Hz (42.5-57.5Hz), 60Hz (51.0-69.0Hz)	
Current Transformer Burden	2.2 Ohm + 1% (if applicable)	
Power Source	Main - Phase A, 55-520 VAC, Backup 6V 0.5Ah Battery	
Power Consumption	10VA typical	
Dimensions	9.1"(23cm) x 4.72"(12cm) x 3.6"(9cm)	
Weight	7lbs (3kg) instrument only	
Environmental & Safety		
Temperature Range	-4F (-20C) to +130F(+60C)	
Humidity	20% to 99% RH	
Protection Class	IP65 (Weatherproof)	
Protection Levels	IEC 61010-1 2001, Pollution Degree 2, Insulation Category III, Material Group III, 600V, Measurement Category III 440V	



PowerView provides user-friendly graphical and tabular viewing of logged data (strip charts), power quality statistics and high speed event snapshots including motor starts, transients and momentary and sustained outages. The data can easily be exported to spreadsheets and other data analysis tools for further manipulation and analysis.