

# PowerMonic

Power Quality & Disturbance Analysers

- Portable
- Easy to use
- Rugged
- Waterproof
- Versatile



## Know your Power Quality –

Analyse power systems and find the cause of disturbances that can result in plant shutdown, equipment failure, increased wear & tear, lost productivity and revenues. The instrument of choice for electrical utilities and is widely used by consultants, plant and network operators, building and industrial electrical engineers.

*Backed by expert support that can be relied upon.*

**GridSense™**

# PowerMonic

Power Quality & Disturbance Analysers

## PM20/PM30



### PM20 POWER QUALITY ANALYSER

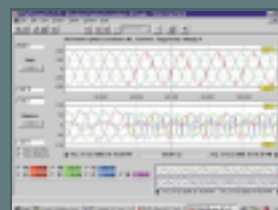
- Tables & graphs of 3 phase V, A, pf, f, kW, kVA, kVAr, THD, total energy & tariffs
- Log Max/Min volts and current over log interval
- High speed RMS capture for logging 'events' such as fast motor starts and HVAC loads
- PQ disturbance capture using "out-of-bounds" absolute limits or percentage change of V&I
- Download files while logging - directly or remotely by cellular modem
- Auto scaling graphs plus zoom, table summaries with filters, sag/swell start and stop times
- Export all data to csv format, PQ analysis and printing of graphs/reports with notes
- Flash memory firmware, Field (software) upgradeable to PM30 if required later

### PM30 POWER QUALITY ANALYSER - ALL PM20 FEATURES PLUS:

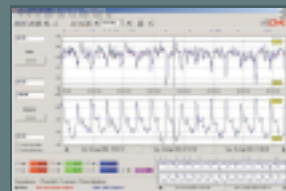
- Waveform event capture (120ms of sinewave) with added transient trigger to record sub cycle waveform disturbances. e.g. spikes, switching capacitor banks, harmonic ripple etc.
- Individual harmonics up to 48th (V and I across all phases)
- Relative Harmonic Phase Angle

### SPECIFICATIONS

	Voltage	Current
Channels	3 (Isolated)	4 (3 Phase + Neutral)
Range (RMS)	Low: 63 to 260V P-N High: 125 to 440V P-N	0-3000A
Mains voltage (Phase-Neutral)	Any within Range	
Instrument Accuracy	+/- 0.4% + 1 Isd	+/- 0.4% + 1 Isd
System Accuracy	+/- 0.4% + 1 Isd	+/- 0.4% + 1 Isd (class 0.5M CTs)
Display Resolution	0.1V	0.1A (to 500), 1A (> 500A)
Temperature	-10° to +60 degrees celcius	
Humidity	20 to 99% RH	
Protection Class	IP65	
Sample Rate	11,413 samples per second	
Log interval	RMS Profile: 10 sec to 4hr log interval RMS Events: 13.6 sec duration at 10ms intervals Waveform Events: 120ms of sinewave at 88us samples (PM30 only)	
Power Source	Phase A voltage channel (separately powered upon request) Rechargeable battery for backup and recording during short term interruptions	
Power Consumption	10 Watts typical	
Burden	2.2 Ohm	
Memory	4Mbyte	
Communication	RS232, 1200-115,200 bps, software selectable	
Display	Selectable scroll of date, time, V,I,pf,f,log status	
Software	PowerView, Windows™ based	
Dimensions	230mm (l) x 120mm (w) x 90mm (d) [9" x 4.7" x 3.5"]	
Weight	2.5kg or 5.5lbs (instrument), typical system 6kg or 13.2lbs	
Safety Compliance	IEC 61010, CAT III	



A typical voltage & current waveform capture



A typical voltage and current profile

### ACCESSORIES

- A range of clip on Current Transformers (CTs) in varying sizes, covering 0 - 3000A, class 0.5M to 2M and IP65 versions.
- Flexible CT kits and solutions
- Substation Converter Kit: 1A:200mA (CK1) or 5A:200mA (CK5)
- Delta, Star or Isolated voltage lead sets, attachments include large conductor clamps, tinned end leads, 4mm banana plug ends and small alligator clamps
- Protective rubber holster and installation strap
- External cellular modem kit
- Carry Bag



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