The Voltech PM100 and PM300 Power Analyzers

PM100 and PM300 single and three-phase power analyzers

Using the proven technology of the world leading Voltech range, these analyzers allow precision bench-top measurements at the price of a portable meter. By connecting directly to the analyzer's 20A-rated internal shunts, the errors of gain and phase found in external current transformers and transducers are eliminated. For measurements above 20A and 1000V, a broad range of transformers, shunts and DC-coupled transducers can be accommodated.

Ideal for general-purpose measurements of watts, power factor, harmonics as well as volts and amps in the design, development and production of electrical and electronic equipment, the PM100 and PM300 are supplied complete with test leads, user manual and certificate of calibration and conformance.

Features and Performance

- 0.1% basic accuracy
- DC to 250kHz bandwidth
- 1000Vpk / 20A RMS direct inputs
- Graphics display of waveforms and harmonic barcharts
- W, V, A, VA, Var, Power factor, Cosϕ, Vpk, Apk, crest factors and frequency
- Channel 1, 2, 3, SUM(Σ) and neutral quantities on the PM300 three-phase analyzer
- Harmonics V, A (incl. phase) and W to the 50th
- Total Harmonic Distortion
- Integrator for W-hr, VA-hr, A-hr, VA-hr, average and target PF
- Easy-to-use menu structure available in different languages
- Accepts and scales for external current and voltage transducers
- IEEE488, RS232, printer, chart recorder and alarm interface cards available
- VPAS Lite Windows software for control and data handling

Detailed specification

Basic Measurements

- W, V, A, VA, Var, power factor, Vpk, Apk, crest factors and frequency
- Channel 1, 2, 3, Sum(Σ) and neutral quantities on 3-phase analyzers
- Harmonics V, A, (including phase) and W
- Total Harmonic Distortion
- Integrator for W-hr, VA-hr, A-hr, VA-hr, average and target PF

Special Features

- Amps inrush
- Continuous fast sampling captures the peak inrush current
- Ballast mode for testing the output of electronic lighting ballast
- Reliable measurements of tube current and power

Optional Interface Cards

- IEEE488 for high speed control and data capture
- RS232 and parallel printer interface. The RS232 serial port allows complete command and results handling as IEEE488. The parallel printer port may be connected directly to a standard printer with a parallel interface for printing displayed or numeric results.
- Chart recorder and alarm interface. Twelve 0-5V DC outputs track any measurement parameter desired. Two free relay contacts can be programmed to toggle at any selected level for alarm or process control purposes. The twelve chart recorder outputs may also be configured as digital alarm

PM300 showing interface card location