


The logo for Voltech, featuring the word "Voltech" in a yellow serif font on a dark blue rectangular background.

Voltech

www.voltech.com

A vertical, grayscale image of a rack of electronic equipment, likely power analyzers, with various displays and buttons visible. A horizontal blue line extends from the top left of the rack across the page.

The PM1000+ Power Analyzer

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Voltech

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PM1000+



In 1997, the PM1000 was the world's first digital power analyser. Today in 2007, Voltech is proud to introduce the **PM1000+**

What makes it so good?

Direct Input Ratings

660Vrms, 1500Vpk

20Arms, 100Apk

External Shunt Input
Ideal for current transducers
with a voltage output as well
as resistive shunts



Bright 320 X 240
color display

Easy-to-use
menu keys

On-board help
and character entry

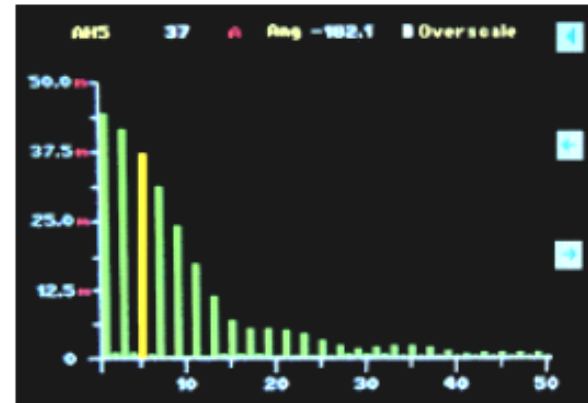
- Big, bright and versatile colour display
- Easy-to-use menu system
- Direct connection to the line
- Special modes for low power, current inrush and energy consumption.
- 0.1% Basic accuracy
- RS232, GPIB, USB and printer interfaces as standard.

Display

Whatever you want to see at the touch of a button



4 – measurement mode



Harmonic Spectrum



14 – measurement mode



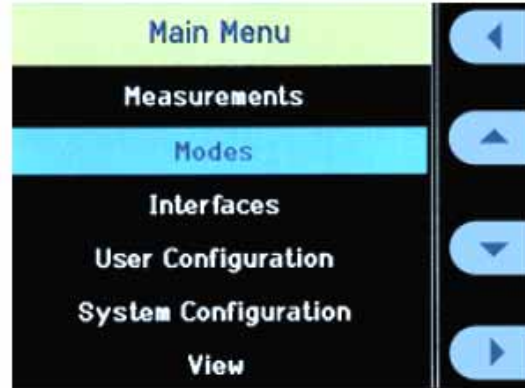
Waveforms

Measurements

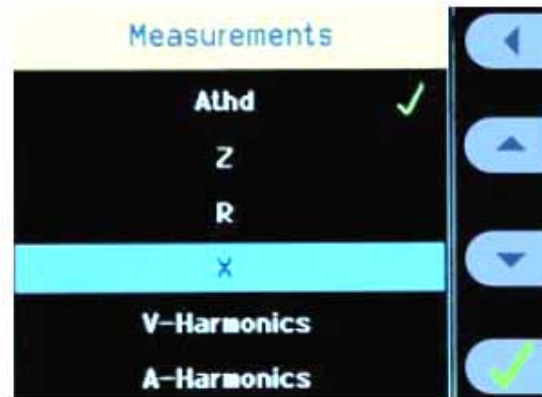
Volts	0 to 600 RMS & +/-1500V Peak Direct Input
Current	0 to 20A RMS & +/-100A Peak Direct Input
Power Watts	0 to 90kW Direct Input
Apparent Power	0 to 90kW Direct Input
Reactive Power	90kW Direct Input
Frequency	DC + 10Hz to 1MHz
Power Factor	-1.000 to + 1.000
Crest Factor	0 to 20.00
Ballast Mode	50/60/400Hz Input Up to 500kHz Output
Harmonics	0 to 50 Voltage and Current
THD	0 to 999%
Energy Whr	Programmable Timer
Inrush Current	Up to 100A peak
Low Power Standby	1 to 300 second window
Impedance	5m Ω to 5M Ω

Menu System

Easy to Configure. On-board Help Too!



Main menu, with modes selected



Measurement Parameter

Measuring Connectors

Direct Inputs at the Front. No CT Errors



- Direct connection to the line.
 - 660Vrms, 1500Vpk
 - 20Arms, 100Apk
- Use with external transformers or transducers to measure ANY power.
- 4mm safety connectors.



Special Modes

Just 1 Selection for the Perfect Measurement!



Modes with standby selected

- Ballast mode for the output of electronic lighting ballasts
- Inrush mode for switch-on peak current measurements
- Standby power for accurate power measurements at less than 1W
- Integrator for energy consumption over time (W-h)

Easy Interfacing

Universal Power Input
85-264 VAC
45-65Hz
25VA

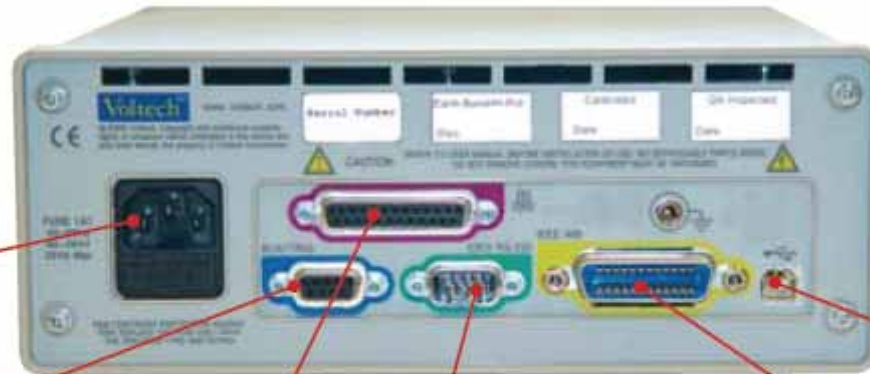
Aux/Trigger Port
(future release)

Printer Port
25 Pin D Sub
Connector

RS232
9600, 38400, 19200
Baud Rates

IEEE 488.2

USB Peripheral



Inrush

:MOD:INR	Select in rush mode
:MOD:INR:RNG 4	Fixes the current range for in rush mode to range 4 (6.25Apk)
:MOD:INR:CLR	
:SEL:CLR	Clear measurements
:SEL:APK+	Selects peak positive current
:SEL:APK-	Selects peak negative current
:FRD?	Returns Apk+ and Apk-

Features That Beat the Rest

	Competition	Voltech PM1000+
Accuracy (1kHz)	0.15% rdg + 0.2% rng	0.1% rdg + 0.1% rng
Bandwidth	100kHz	1MHz *
Crest Factor	3	20 *
Inrush mode	✗	✓ *
Standby Power mode	✗	✓ *
Ballast mode	✗	✓ *
4 line display	3 only	✓
14 line display	✗	✓ *
USB, RS232	✗	✓ *
GPIB, Printer	Option	✓
Colour Waveform and Barchart	✗	✓ *
Harmonics	Option	✓

Benefits for Our Customers?

- Any organization that designs, manufactures or supplies products that consume electrical power.
Here are some:
- Power supply manufacturers
 - Easy to identify and target from trade directories
- Appliance manufacturers – domestic and office goods
 - Energy consumption / integration
- Education & Research
 - Exciting yet accurate tool
- Ballast and Lighting Manufacturers
 - Nothing in this price range is as accurate at high frequencies

Thanks For Listening!

Remember our website is packed with materials and resources....