Specification

VOLTAGE	Ranges	900, 215, 46, 10 Vpk
	Frequency range	10Hz to 1MHz
Maximum input	Continuous	600V rms, 1500 Vpk (over voltage), 600V dc
Maximum input	Peak < 1 second	5000 Vpk (over voltage)
	Input Impedance	1 MΩ
	Display	4.5 Digits
	Crest Factor	20 (Peak/RMS)
RMS 45-65Hz, 95-265V, VTHD <5%	Accuracy	0.05% of rdg + 0.05% of range
RMS (General)	Accuracy	0.1% of rdg + 0.1% of range + 4mV + (0.02 * F)% of rdg
DC	Accuracy	0.1% of rdg + 0.4% of range + 5mV
VOLTAGE +/- PEAK	Accuracy	0.5% of rdg + 0.5% of range + (0.02 * F)% of rdg
CURRENT	Range	100, 25, 6.25, 1.6, 0.4, 0.1 Apk
	Frequency range	10Hz to 1MHz
Maximum input	Continuous	20Arms
Maximum input	Peak < 1 second	60Arms (over current)
	Input resistance	12.5 mΩ
	Crest Factor	20 (Peak/RMS)
RMS 45-65Hz, 95-265V	Accuracy	0.1% of rdg + 0.1% of range
RMS 45-65Hz, 95-265V (Ext. Shunt)	Accuracy	0.1% of rdg + 0.1% of range + 20uV / Zext
RMS (General)	Accuracy	0.1% of rdg + 0.1% of range + 1mA + (0.02 * F)% of rdg
DC	Accuracy	0.1% of rdg + 0.4% of range + 1mA
CURRENT +/- PEAK	Accuracy	0.5% of rdg + 0.5% of range + (0.02 * F)% of rdg
WATTS	Range	1W to 90kW
	Frequency range	10Hz to 1MHz
45-65Hz	Accuracy	[{(Verror/Vreading) + (Aerror / Areading)} * Wreading] + (0.1/PF)% of Wreading
	Accuracy	0.2% rdg + 0.1% range + 4mW + ((0.05/PF) * F)% of rdg
VA	RANGES	1VA to 90kVA
	Frequency range	10Hz to 1MHz
	Accuracy	0.2% rdg + 0.1 % of range +4mVA + (0.05 * F)% of rdg
VAr	Range	1VAr to 90kVAr
	Frequency range	10Hz to 1MHz
	Accuracy	0.2% rdg + 0.1% range + 4mVAr + ((0.05/1-PF) * F)% of rdg
POWER FACTOR	Range	-1.000 to +1.000
	Accuracy	+/-0.002 +/- ((0.001/PF) * F)
FREQUENCY	Range	DC and 10Hz to 1MHz
	Accuracy	0.1%

Specification

VOLTAGE CREST FACTOR	RANGE	1.00 to 20.0
	Accuracy	%Vpk error + % Vrms error
CURRENT CREST FACTOR	RANGE	1.00 to 20.0
	Accuracy	%Apk error + % Arms error
PEAK INRUSH CURRENT	RANGE	100Apk
	Accuracy	2% of range +/- 20mA
HARMONIC ANAYLSIS	Number of V & A Harmonics	50
	Accuracy	0.2% of Reading + 0.1% of range +0.04% per kHz
	Frequency Range	10Hz to 450kHz
THD		
Total Harmonic Distortion	Range & Accuracy	Range 0-999%
		Accuracy 0.4% + (0.1 * F)% of reading
	Formula	Series or difference
STANDBY POWER	Time Window	1-600 sec
	Resolution	1 second
IMPEDANCE	Range	0.005Ω to 1MΩ
	Accuracy	0.2% of Reading +0.1% of range
		+5mΩ + ((0.05/PF) * F)% of reading
RESISTANCE	Range	0.005Ω to 1MΩ
	Accuracy	0.2% of reading + 0.1% of range +5mΩ + ((0.05/PF) * F)% of reading
REACTANCE	Range	0.005Ω to 1MΩ
	Accuracy	0.2% of reading + 0.1% of range +5mΩ + ((0.05/1-PF) * F)% of reading
EXTERNAL SHUNT	Input Range	+/- 1250 mVpk
SCALING		0.0001 to 100000
IEC HARMONICS	Accuracy	Class II to IEC61000-4-7
IEC FLICKER	Accuracy	5% for Pst 0.3 to 5.
NOTES		F is in kHz, Zext = impedance of an external shunt.
MECHANICAL		1/2 rack size. Rack height 85mm
		W = 224mm. Height including feet 103mm
		D = 285mm. Weight 3.21Kg (7lbs.)

Ordering Information

	Item	Part #	Description
	PM1000+	100-090	Power Analyzer with integrator, harmonics and THD measurements. 0.05% basic accuracy, 1MHz bandwidth. Includes color display, measuring leads and RS232, USB peripheral and parallel printer interfaces.
Options and Accessories	IEEE488.2 (GPIB)	130-030	IEEE488.2 interface.
	USB (Master) and Ethernet	130-031	USB master (for memory) and ethernet interfaces.
	Extended Warranty (per year)	130-025	Warranty extension per year.
	Universal Break-Out Box	100-089	Safety load connection box and external (low power) shunt.
	IEC Harmonics and Flicker	250-027	Pre-compliance IEC61000-2-2/3 harmonics and flicker testing.
	CL100	CL100	100:1 Clamp-on current transformer.
	CL1000	CL1000	1000:1 Clamp-on current transformer.
	CT1000	CT1000	Dual ratio 1000:1 and 100:1 current transformer.
	PS1000	PS1000	Switch for measuring inrush current.
	Ballast CT	BALLASTCT	Isolating current trnsformer for ballast measurements.

Free Application Notes and Handbooks

- Power Supply Testing
- ENERGY STAR Measurements
- AC Theory - Back to Basics
- Three -Phase Measurements
- Measurements in Lighting Applications
- Low-Power Standby Measurements (IEC62301)
- IEC61000--3-2/2 Harmonics and Flicker

Contact Us for your application notes or to request a no obligation demonstration.

www.voltech.com

Distributed by:

Voltech Instruments Inc.
Fort Myers, FL. **USA**
Tel: (239) 437 0494
Fax: (239) 437 3841
sales@voltech.com

Voltech Instruments Ltd.
Oxfordshire. **UK**
Tel: +44 (0) 1235 834555
Fax: +44 (0) 1235 835016
salesuk@voltech.com

Voltech Instruments (Nantong) Ltd.
Nantong City, Jiangsu. **China.**
Tel: +86 513 853 00652
Fax: +86 513 853 00658
sales@voltech.com.cn