DCM1000P

PowerClamp/Digital Clampmeter



- Excellent Price Performance
- Measures power quantities on 1-f & 3-f systems
- d.c. & a.c. True RMS response
- Real-time bargraph display
- Auto-sensing a.c./d.c./(a.c.+d.c.)
- Built-in digital output
- Auto-ranging

DESCRIPTION

The Megger® DCM1000P is an advanced clampmeter, giving true RMS readings of not only current and voltage, but of power quantities too. It measures a.c. and d.c. true RMS, giving accurate results even with distorted waveforms.

Measurement can be made of power, apparent power, reactive power and power factor, in single-phase and balanced three-phase systems with no need for additional adapters or calculations.

PowerLog

The optional PowerLog interface and software package allows data logging directly to a PC and simple transmission of stored data for further analysis and archiving. In addition to logging up to five parameters at a time it is also possible to log waveforms and harmonics screens together with THD values. This ensures fast identification and quantification of intermittent harmonics problems.

PowerLog chart table and harmonics Modes



Modes

The DCM1000P and PowerLog have been designed for ease of use with Quick Log functions and simple data download of saved screens. Data presentation is in chart or table format for quick identification and analysis of trends. For report preparation graphics and data can be easily exported into other applications.

POWERLOG - KEY FEATURES

When used with the DCM1000P PowerLog exhibits the following key features:

- Easy to use Windows format
- Data presentation in display mimic
- Table and chart modes
- Waveform and data download
- Harmonic analysis of waveforms
- Logging of up to five parameters
- Simple exporting of data and trends into other Windows applications.

PowerLog -

System Requirements:

The minimum PC configuration to run PowerLog is as follows:

- 486 66 MHz Processor
- 8 MB Ram
- 5 MB Hard Disk space free
- Microsoft Windows 3.1x, 95 or NT



PowerLog is supplied complete with serial communications lead.

SPECIFICATIONS

Current Measurement

d.c.-coupled True RMS

Ranges 400 A, 1000 A d.c. or a.c. pk

Accuracy $I > 20 \text{ A} \pm 1,5\% \pm 5 \text{d}$

 $I \le 20 A \pm 1 A$

Frequency d.c., 20 Hz - 1 kHz

Voltage Measurement

d.c.-coupled True RMS

Ranges 400 V, 600 V

Accuracy $V > 40 \text{ V} \pm 1\% \pm 5 \text{d}$

 $V \le 40 A \pm 1 V$

Frequency d.c., 20 Hz - 1 kHz

Power Measurement

(1-f & 3-f)

Ranges 40 kW, 400 kW, 600 kW (to 425 kW a.c.)

Accuracy $\pm 2,5\% \pm 5d$ except

1-f: <2 kW \pm 0,08 kW

 $3-f: < 4 \text{ kW} \pm 0.25 \text{ kW}$

Frequency d.c., 20 Hz - 1 kHz

VA Measurement

(1-f & 3-f)

Ranges 40 kVA, 400 kVA, 600 kVA (to 425 kVA a.c.)

Accuracy $VA > 2 \text{ kVA } \pm 2,5\% \pm 5 \text{d}$

 $VA \le 2 \text{ kVA } \pm 0.08 \text{ kVA}$

Frequency d.c., 20 Hz - 1 kHz

V Ar Measurement

Ranges 600 V Ar, 200 kVAr

Accuracy VAr>2 kVAr $\pm 2,5\%$ $\pm 5d$

 $VAr \le 2 kVAr \pm 0.08 kVAr$

Frequency d.c., 20 Hz - 1 kHz

PF Range 0,3 - 0,99

Power Factor (COSf)

Range -0,3 -1.0 - +0,3

(cap) (ind) $(72,5^{\circ} -0^{\circ} +72,5^{\circ})$

 Resolution
 0,01

 Accuracy
 ±3°

Frequency 20 Hz - 1 kHz

Frequency Measurement

(from current or voltage sources)

Range 20 Hz - 1 kHz

Resolution 0,1 Hz

Accuracy 40 - 70 Hz ±0,5%

20 - 1000 Hz ±1%

Power Supply

1x9 V alkaline battery, IEC 6-LF22 Continuous battery life Typically 12 hours

AutoPower Off feature

Display

- 4000 count main display, 10 mm high digits
- Secondary 25-segment bargraph indicator with scale
- MIN/MAX./AVG. indicators in record mode
- Data Hold indicator
- a.c./d.c./a.c. + d.c. indication
- Low battery warning

Dimensions 251 mm x 98 mm x 52 mm

(9,9" x 3,9" x 2,1" approx.)

Weight 500 g (1,1 lb)

Jaw Opening Max. 55 mm (2,2")

1x55 mm cable or 2x30 mm cables

Temperature

Reference $23^{\circ}\text{C} \pm 1^{\circ}\text{C}$

Operating Range 0°C - 50°C (32°F - 122°F) **Storage** -20°C - 60°C (-4°F - 140°F)

Temp. Coefficient $\pm 0.1\%$ of reading $/^{\circ}$ C (voltage and current)

Humidity Range 0-95% RH

Safety

Complies with EN61010-2-032, 600 V, Installation category III, Pollution Deg.2 Test leads compliant to EN61010-2-031.

ORDERING INFORMATION	
Item	Order Code
Power Clampmeter, W, VAr, VA, PF	
a.c./d.c., True RMS	DCM1000P
Included Accessories	
User Guide	
Warranty Card	
Test Leads	
Zip-up pouch	
Optional Accessory	
Powerlog data download software & cable	6220-633

Archcliffe Road Dover CT17 9EN England T +44 (0) 1304 502101 F +44 (0) 1304 207342 4271 Bronze Way Dallas TX 75237-1088 USA T 800 723 2861 (USA only) T +1 214 333 3201 F +1 214 331 7399

OTHER TECHNICAL SALES OFFICES

Norristown USA, Toronto CANADA, Mumbai INDIA, Paris FRANCE, Sydney AUSTRALIA, Madrid SPAIN and the Kingdom of BAHRAIN. Registered to ISO 9001:2000 Reg no. Q 09290 Registered to ISO 14001 Reg no. EMS 61597

DCM1000_P_DS_en_V11