DCM300E
Earth Leakage Clampmeter



- **0,01 mA resolution**
- **EMC & EN61010-1 compliant**
- **30 mA, 300 mA, 30 A & 300 A range**
- **40 mm jaw size**
- **Analogue Bargraph & Digital Display**

DESCRIPTION

The DCM300E is designed mainly to check earth leakage currents. However, the upper range will measure currents of up to 300 A a.c. making it a totally versatile instrument capable of taking most current measurements.

The instrument has four ranges; 30 mA, 300 mA, 30 A and 300 A with a minimum resolution of 0,01 mA on the 30 mA range.

For those hard to read measurements, where there are problems of accessibility or poor lighting, a data hold feature has been incorporated, to aid measurement.

To save battery life when not in use the instrument has an automatic power off feature and will turn itself off if it hasn't taken any readings over a 10 minute period. This totally new clampmeter development ensures that the latest safety design standards EN61010-2-32 and EMC requirements are met. Safety is enhanced with the incorporation of a tactile barrier. Extra insulation has been used around the jaw specifically to reduce the possibility of causing a short circuit between live conductors, as well as protecting the operator from accidentally getting an electric shock.

Simply Clamp on

With existing installations especially, by far the simplest and easiest method of checking an installation is with a clamp-on current meter. The clampmeter can be used to locate the fault within the circuit without it being necessary to disassemble the wiring.

APPLICATION

A typical application for the clamp-meter would be the measurement of earth leakage current in a circuit where the RCD keeps tripping out. The measured result will quickly identify whether the earth leakage current present is excessive causing the RCD to trip, or that the RCD itself is faulty. Standing earth leakage can be the result of various undetected faults in the installation such as cable insulation deterioration, cable damage or the entry of moisture into areas where there are exposed terminals or fittings.

The instrument is pocket sized, light weight, rugged and easy to use, making it an ideal choice for the electrical industry.

FEATURES

- 0,01 mA resolution for measuring earth leakage currents
- 300 A range for standard current measurements
- Analogue Bargraph Display for trending
- Handguard designed for operator safety
- Pocket sized and lightweight

SPECIFICATIONS

Measuring Method: Dual integration mode

Measuring Function: Leakage current and load current

Display: 3,5 digit L.C.D.; max. reading of 3200

Range: 0-30 mA/300 mA/30 A/300 A (50/60Hz)

Ranging: 2 manual ranges

Accuracy specified at operating temperature: 23°C ± 5°C, 80% RH max.

Range	Min. Resolution	Accuracy
30/300 mA	0,01/0,1 mA	±1,2% rdg ±5 dgt 0-200 A: ±1,2% rdg ±5 dgt
30/300 A	0,01/0,1 A	200-250 A: ±3,0% rdg ±5 dgt 250-300 A: ±5,0% rdg ±5 dgt

Jaw Opening Capability: 40 mm

Over Range Indication: "OL" mark on L.C.D.

Maximum Indication: 3200

Low Battery Indication: 2,5 V - 2,7 V; "+-" mark on L.C.D.

Data Hold Indication: "DH" mark on L.C.D.

Sampling Time: Approx. 2 times/sec. (digital display)
Approx. 12 times/sec. (bargraph display)

Auto Power Off: The meter is set to power off mode approx. 10 minutes after the power switch on

Limitation of Circuit Voltage: Less than a.c. 600 V

Withstanding Voltage: a.c. 3700 V/1 minute max. (between the core of CT and the unit housing)

Operating Temperature: 0 – 40 °C <80% RH (non-condensing)

Storage Temperature: -10 – 60 °C <70% RH (non-condensing)

Power Supply: 2 x 1,5 V button cells LR44 or SR 44

Power Consumption: Approx. 5 mW

Battery Life: Approx. 50 hrs. (LR44)

Size: 64 (W) x 176 (H) x 23 (D) mm
2,5 (W) x 7 (H) x ,9 (D) inches approx.

Weight: Approx. 125 g (1/4 lb. approx.)

Safety

EN61010-1 and EN61010-2-032 300 V phase to earth and 500 V phase to phase CAT III or 600 V CAT II double insulated

EMC

In accordance with IEC61326 including amendment No.1.

ORDERING INFORMATION

Item	Order Code
Earth Leakage Clampmeter	DCM300E
2 Batteries (2 x LR44)	
Carrying Case	
Instruction Manual	6172-172

UK
Archcliffe Road Dover
CT17 9EN England
T +44 (0) 1304 502101
F +44 (0) 1304 207342

UNITED STATES
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, Trappes 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
DCM300_E_DS_en_V10

www.megger.com
Megger is a registered trademark