

DCM330

Fork Multimeter



- **200.0 A ac Open Jaw current measurement**
- **0.1 V to 1000 V auto-ranging ac and dc voltage measurement**
- **0.1 Ω to 20.00 M Ω resistance range**
- **Continuity buzzer and diode check**
- **Non-contact detection of AC voltage**
- **CAT III 1000V and CAT IV 600 V**

DESCRIPTION

The Megger DCM330 Fork Multimeter is a convenient, compact instrument designed to measure ac current up to 200 A, and perform the basic functions of a basic multimeter.

With ac and dc voltage measurements up to 1000 V and resistance measurements up to 20 M Ω , a non-contact voltage detection facility and a continuity buzzer with diode check, the Megger DCM330 is a truly versatile instrument. All of these features combined into a single compact instrument eliminate the need for separate multimeter and clampmeter.

The large central range knob enables ambidextrous single-handed use, and the separate voltage/resistance test leads can be disconnected when not in use.

The open-jaw design of the clampmeter enable simple and fast measurements to be made on single conductors up to 16mm diameter. With no moving clamp parts, the Megger DCM330 is not susceptible to dirt, grit or moisture around the cable, so is equally ideal for use in dirty trenches or trunking; or clean laboratory conditions. It provides average responding RMS values, and with the conductor(s) positioned centrally and squarely within the jaws, achieves readings of better than 3% accuracy.

The Megger DCM330 is auto-ranging on all ranges. Current measurement and the non-contact voltage sensor do not need the test leads; all other functions will require their use.

The voltage detection function can identify the presence of live AC voltages from 50 V to 1000 V at 50 to 500 Hz.

It is operational on any range including OFF. Voltage is capacitively detected, signalled by a tone sounding and the illumination of a red LED situated below the clamp head.

The Megger DCM330 is powered by 2 x AAA cells providing 250 hours of operation, and has an auto-off feature that activates after approximately 10 minutes.

The tough body provides easy and comfortable grip, providing durability while stored in a tool box or pocket. The DCM330 is designed to withstand a 1.22m (4 feet) drop without damage.

The display is a large 3½ digit LCD. In difficult or awkward locations, the display can be frozen with the "HOLD" function, removed from the cable under test and read independently.

ADDITIONAL FEATURES

- **Compact pocket sized design**
- **Auto power-off**
- **Supplied with detachable test leads and carry-case**

APPLICATIONS

The DCM330 is suitable for use anywhere where there is a requirement to measure ac current in single unshielded conductors less than 16mm diameter, or ac/dc voltages up to 1000 V, or resistances up to 20 MΩ.

Typical applications include domestic and industrial wiring installation fault-finding, basic load analysis, equipment commissioning and maintenance, machinery installations, etc.

Note: The non-contact Voltfinder function is intended to identify live cables within the jaws, and is not suitable for use on shielded conductors such as armoured cable or those within or behind metallic or conductive panels, in metal conduit, etc.

SPECIFICATION

(accuracies specified at 23°C)

AC current

| Frequency | Range | Accuracy |
|------------|-------------|---------------|
| 50 - 60 Hz | 0 - 200.0 A | ±3% ±3 digits |

Average sensing, RMS indicating

Overload protection: 400 A rms

AC/DC volts

| Range | DC | AC |
|---------|---------------|-----------------|
| 200.0 V | ±1% ±2 digits | ±1.5% ±5 digits |
| 1000 V | | 50 Hz - 500 Hz |

Input impedance: 2 MΩ (<100 pF)

Overvoltage protection: 1000 V

Resistance

| Range | Accuracy |
|----------|------------------|
| 200.0 Ω | ±1% ±5 digits |
| 2.000 kΩ | ±1% ±2 digits |
| 20.00 kΩ | |
| 200.0 kΩ | |
| 2.000 MΩ | |
| 20.00 MΩ | ±1.9% ±5 digitsΩ |

Overload protection: 600 V rms

Diode check

1 mV: ±1.5% ±0.05 V

Overvoltage protection: 600 V rms

Continuity

Buzzer operates: <50 Ω

Turns off: >250 Ω

Response time: 0.25 sec - 1 sec

Display

3 1/2 digit large LCD

2000 count

Sample rate: 1.5/sec

Overrange: "OL"

Auto power off

10 minutes after power on

Battery

R03 UM4 AAA 1.5 V x 2 (not suitable for rechargeable cells)

Life: 250 hours (alkaline cells)

Calibration: 12 months

Operating altitude: 2000 m

Operating temperature

0°C - 30°C (>80% RH)

30°C - 40°C (>75% RH)

40°C - 50°C (>45% RH)

Storage temperature

-20°C - +60°C (0 - 80% RH) (batteries not fitted)

Dimensions

54 mm (W) x 193 mm (H) x 31 mm (D)

Weight

280 g (battery installed)

Safety

IEC61010-1 1000 V CAT III

600 V CAT IV

EMC

EN 61326-1

Drop protection

1.2 m drop onto hard floor

ORDERING INFORMATION

| Item (Qty) | Order Code |
|---|------------|
| Fork Multimeter; 200A ac; 1000V dc | 1000-219 |
| Included accessories | |
| Batteries | |
| Pouch | |
| Test leads | |
| User guide | |
| Replacement test leads | |
| Red/black test leads with croc clips | 6220-779 |
| Red/black fused test leads (500 mA) with croc clips | 6220-789 |