

Megger.

DCM340

Digital clamp meter



- DC and AC current and voltage
- 600 A and 600 V
- Resistance and Continuity
- 3 ¾ digit, 4000 count display with Backlight
- High resolution digital bargraph
- Peak, Min/Max and Data-hold functions
- Zero-offset REL mode for comparative measurements
- Supplied complete with test leads and carry case
- IEC61010 CAT III 600 V

DESCRIPTION

The DCM340 is a highly versatile instrument and ideal for use in the installation, maintenance, monitoring or checking of a.c. or d.c. electrical systems and equipment.

There are four instruments in the family of high quality DCM300 series clamp meters from Megger, including the 400A a.c. current-only DCM310; the DCM320 which includes voltage and resistance measurement; the DCM330 Fork-Multimeter, which is an open fixed-jaw design; and this, the DCM340. Capable of measuring a.c. and d.c. current up to 600A; a.c. and d.c. voltage up to 600V; resistance up to 400Ω; and frequency up to 400Hz, the DCM340 is the most versatile in the range.

Current measurement combined with the comprehensive and accurate multimeter functions of the DCM340 eliminate the need to carry around both a clamp and multimeter – this instrument does it all.

The large clear digits of the numeric display are complimented by the high-resolution digital bar graph, useful for indicating trending and fluctuation of measurement. The backlight assists use in poorly lit areas such as distribution cupboards and corners of switchrooms; and the data-hold feature enables use on difficult access cables where otherwise the display may be impossible to see.

Min/Max hold provides the ability to store the maximum and minimum d.c. or rms values over a period of time. While storage is taking place, either the present, maximum or minimum value can be displayed. Peak hold stores the maximum and minimum peak value of an a.c. signal at a 10ms sample rate. The auto-off feature

automatically places the meter in power-save mode after 30 minutes from power-on, but this can be disabled if required for min/max measurements.

Using the Relative mode (REL), a stable value can be stored, the instrument zeroed at that point, and then any variation from that value is displayed as a direct measurement relative to it.

The DCM340 is safety rated to IEC 61010-1 Cat III 600V, and is drop-tested to 1.2m onto a hard floor. It is supplied with test leads and a carry case, and a full 1-year manufacturers warranty.

APPLICATIONS

The DCM340 is designed to be used on electrical systems and equipment where there is a need to measure current, volts, resistance and frequency. It is therefore intended for use while installing, maintaining, fault-finding or monitoring those systems.

The min/max and peak-hold enable maximum load currents from equipment to be identified such as start-up currents to motors and heaters.

With the added benefit of d.c. current measurement, it can also be used in applications including domestic power generation from solar panels and wind-turbines; battery monitoring; automotive uses for charging and load circuits; electric vehicle servicing such as fork-lift trucks; lift maintenance; UPS commissioning, servicing and maintenance; electro-plating plants and welding equipment servicing.

SPECIFICATION

Base specifications only. For detailed specification, refer to User Guide

All accuracies specified at 23°C ± 5° < 80%Rh

AC Current

Range	Accuracy 50~60Hz	Accuracy 61~400Hz
0~60.0A	±1.9% ± 7 dgt	±2.5% ± 7 dgt
60.0~400.0A	±1.9% ± 5 dgt	±2.5% ± 5 dgt
400~600A	±2.5% ± 5 dgt	±2.9% ± 5 dgt

DC Current

Range	Accuracy
0~60.0A	±1.5% ± 10 dgt
60.0~400.0A	±1.9% ± 5 dgt
400~600A	±1.9% ± 10 dgt

Voltage

Range	Accuracy 50~500Hz	Accuracy DC
0~400.0 V	± 1.0% ± 5 dgt	± 0.7% ± 2 dgt
400~600 V	± 1.0% ± 5 dgt	± 0.7% ± 2 dgt

Input impedance: 1Ω // < 100pF

Resistance and Continuity

Range	Accuracy
0~400.0 Ω	± 1% ± 3 dgt

Open circuit voltage: 3 V
Continuity Check: beeper sounds @ < 30 Ω

Frequency

Range	Resolution	Accuracy
20~400 Hz	1 Hz	± 0.1 % ± 2 dgt

Sensitivity: 3 A

Peak Hold: ± 3 % ± 15 dgt
Sample time: 10ms

MIN/MAX Hold:

add 15 dgt to accuracy for a.c. & d.c. A

Positional error: ±1% of reading

Overload protection: 600V & 600A rms

AC conversion: Average sensing rms indication calibrated to the rms value of a sine wave input

Auto power-off: 30 minutes after power-on

LCD

Display: 3¾ digit large-scale readout

Count: 40,000

Sample Rate: 1.5 per second

Overrange: "OL"

Power Requirement

1 x 9V PP3 MN1604 6LR61 alkaline cell

Battery life: 200 hours (alkaline)

Operating Temperature

0°C ~ 30°C < 80% Rh

30°C ~ 40°C < 75% Rh

400°C ~ 50°C < 45% Rh

Storage Temperature

-20°C ~ +60°C (<81% Rh)
(batteries removed)

Overvoltage safety category:

IEC 61010-1 600V CAT III

Operating Altitude: 2000m

Drop-protection: 1.2m onto a hardwood surface.

Jaw size/maximum conductor: 35mm Diameter

Calibration period: 12 month recommended

ORDERING INFORMATION

Part No	Description
1000-305	DCM340 Digital clampmeter; 600 A ac & dc; 600 V a.c. & d.c.; 400Ω; 400Hz