Portable Digital Ohmmeter

Series 4000

The series 4000 digital ohmmeters offer true portability without any sacrifice to accuracy or functionality. These ruggedly constructed instruments are housed in a stylish plastic case with an easy to use keyboard, the measured values are displayed in large LCD panel. Many advanced measurement features are included, Long scale length 4000 count, Auto average of forward and reverse current measurement, true zero of measured value and temperature compensation (model 4001). Rechargeable batteries with automatic power off ensures the best possible battery performance.

- **True 4 terminal measurement eliminates lead resistance errors**
- **Wide measuring range 40mΩ...4kΩ, 10 μΩ resolution on lowest range**
- **Auto/manual range selection**
- **Enhanced accuracy with Auto average of forward and reverse measurements**
- **True Zero button**
- **Digital Calibration**
- **Automatic temperature compensation (model 4001)**
- **Displays Resistance and temperature -50...+800°C (model 4001)**
- **Rechargeable battery operation**
- **Auto power off to maximise battery life**

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TECHNICAL DATA

The series 4000 portable digital ohmmeters are a practical range of instruments for low resistance measurement, ideal for use in the workshop on site or in the laboratory. Constructed in a hand portable plastic case sealed to IP54 standard the series 4000 offers many advanced features, including auto reverse of measurement current, which eliminates errors due to thermal emf. A true zero button, which will allow the measurement to be set to zero. Protection up to 415Vrms at the measurement terminals and automatic temperature compensation (model 4001).

Range selection may be either automatic or manually selected, and the rechargeable battery pack is easily and quickly replaced with a spare unit, ensuring minimum measurement down time. To further enhance the battery life an automatic power off facility is incorporated.

The measured values are displayed in a large LCD screen with LED indicator lamps to show the measurement units and open circuit lead condition.

The 4000 series are delivered ready to use with battery pack, test leads, and calibration certificate.

Range	Resolution	Typical Current	Uncertainty @20°C ±5°C, 1 year	Temperature Coefficient / °C
4kΩ	1Ω	100µA	±(0.05%Rdg + 0.02% FS)	30ppm Rdg +1 ppm FS
400Ω	100mΩ	1mA	±(0.05%Rdg + 0.02% FS)	30ppm Rdg +1 ppm FS
40Ω	10mΩ	10mA	±(0.05%Rdg + 0.02% FS)	30ppm Rdg +1 ppm FS
4Ω	1mΩ	10mA	±(0.05%Rdg + 0.03% FS)	30ppm Rdg +4 ppm FS
400mΩ	100µΩ	10mA	±(0.05%Rdg + 0.05% FS)	30ppm Rdg +25 ppm FS
40mΩ	10µΩ	100mA	±(0.05%Rdg + 0.05% FS)	30ppm Rdg +25 ppm FS

Display
15mm LCD 4000 count with automatic decimal point and polarity indication

Ranges
6 ranges, with manual or automatic range selection. LED indication of measurement units.

AVERAGE
Automatic average and display of measurement with forward and reverse current.

ZERO
Zero button to null measurement offsets

CALIBRATION
Digital Pass code protected

PROTECTION
415Vrms maximum at terminals will blow internal protection fuse

BATTERY

Removable battery pack with 4 1.5Volt rechargeable batteries. Separate battery pack docking station charger

TERMINALS

4mm safety sockets

WORKING TEMPERTURE
0...40°C rel. humidity 80% max. non condensing

Storage Temperature
-20...+50°C

SAFETY
EN61010-1 EMC-EN61326

DIMENSIONS
215 x 130 x 55mm (H W D)

MASS
0.8kg

ACCESSORIES
Supplied complete with Battery pack and external charger, measuring leads with Kelvin clips and calibration certificate

ADDITIONAL FEATURES AVAILABLE ON MODEL 4001

TEMPERATURE COMPENSATION (Model 4001)
Automatic temperature compensation with coefficients for copper, brass plus user coefficients.

TEMPERATURE MEASUREMENT
Measurement of temperature with Pt100 sensor. Measurement range -200...+850°C

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