# Portable Digital Ohmmeter



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.

# Series 4000

- 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

# TECHNICAL DATA

The series 4000 portable digital ohmmeters are 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 4000 offers series manv advanced features, including auto reverse of measurement which eliminates current. 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. the and 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	Uncertainty @20°C	Temperature Coefficient
		Current	±5°C, 1 year	/ °C
4kΩ	1Ω	100μΑ	$\pm (0.05\% \text{Rdg} + 0.02\% \text{FS})$	30ppm Rdg +1 ppm FS
400Ω	100mΩ	1mA	$\pm (0.05\% \text{Rdg} + 0.02\% \text{FS})$	30ppm Rdg +1 ppm FS
40Ω	10mΩ	10mA	$\pm (0.05\% \text{Rdg} + 0.02\% \text{FS})$	30ppm Rdg +1 ppm FS
$4\Omega$	1mΩ	10mA	$\pm (0.05\% \text{Rdg} + 0.03\% \text{FS})$	30ppm Rdg +4 ppm FS
400mΩ	100μΩ	10mA	$\pm (0.05\% \text{Rdg} + 0.05\% \text{FS})$	30ppm Rdg +25 ppm FS
40mΩ	10μΩ	100mA	$\pm (0.05\% \text{Rdg} + 0.05\% \text{FS})$	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



