



## **BIDDLE®** **Digital** **Micro-Ohmmeter**

- 0.1- $\mu\Omega$  resolution
- Automatically compensates for thermal EMFs
- Line or rechargeable battery operation

# 1-Ampere Pulse, Laboratory Type Digital Micro-Ohmmeter

## **DESCRIPTION**

The Biddle® Digital Micro-Ohmmeter is a lightweight, easy-to-operate instrument designed for making low-resistance measurements requiring a low test current and high resolution (it should be noted that pulse test current is not suitable for the testing of inductive components).

A four-terminal measuring method using color-coded test leads automatically eliminates the effects of test lead resistance upon the measurement so that the true resistance is displayed on the digital readout.

The reading is automatically corrected for the effects of static and varying thermal EMFs, and is updated every 1.6 seconds. The display alerts the operator to reversed-lead connections,

open-lead connections or high-resistance connections.

The very high rejection of line frequency interference and spurious dc voltage such as thermal EMFs provides for accurate and stable resistance measurements under a wide variety of conditions.

The micro-ohmmeter is completely self-contained and ideal for field and laboratory use.

## **APPLICATIONS**

Specifically designed for the accurate measurement of low resistances, the Digital Micro-Ohmmeter is used for applications including:

- Inspection of components such as resistors, fuses, connectors, fine wires

and cable harnesses

- Quality control for repetitive batch testing of contact resistance in switches and relays
- Resistance measurement of tracks and plated through holes on printed circuit boards.

## **FEATURES AND BENEFITS**

- Easy to operate
- Four-wire measurement
- Automatically compensates for thermal EMFs
- Resolution to 0.1  $\mu\Omega$
- Line or rechargeable battery operation

- 3<sup>1</sup>/<sub>2</sub>-digit LCD readout

**SPECIFICATIONS**

**Connections**

Four color-coded banana jacks

**Display**

3<sup>1</sup>/<sub>2</sub>-digit LCD

**Reading Rate**

1 reading per 1.6 seconds

**Zero**

Automatic

**Thermal EMF Compensation**

Automatic

**Over-range**

Left digit displays "1"; other digits blanked

**Low-battery Indication**

"LO BAT" displayed when 15 minutes remain on micro-ohm range

**Battery Charger**

Built-in; full recharge in 24 hours

**Accuracy**

±(0.25% of reading +2 lsd)

**Power Source**

120- or 240-Vac (50/60-Hz) line or rechargeable batteries with internal charger

**Dimensions**

9 H x 9 W x 4 D in.  
230 H x 230 W x 100 D mm

**Weight**

6.5 lb (2.8 kg)

Resistance Range	Resolution	Test Current
0 to 199.9 μΩ	0.1 μΩ	1 A
0 to 1999 μΩ	1 μΩ	1 A
0 to 19.99 mΩ	0.01 mΩ	0.1 A
0 to 199.9 mΩ	0.1 mΩ	0.1 A
0 to 1999 mΩ	1 mΩ	0.1 A
0 to 19.99 Ω	0.01 Ω	0.5 mA
0 to 199.9 Ω	0.1 Ω	0.5 mA
0 to 1999 Ω	1 Ω	0.5 mA

**ORDERING INFORMATION**

Item	Cat. No.
Digital Micro-Ohmmeter .....	247800
<b>Included Accessories</b>	
Color-coded test leads, 10 ft [3 m], with removable alligator clips .....	242803-10
Power cord .....	17032
Instruction manual .....	AVTM24-78J
<b>Optional Accessory</b>	
Helical spring point leads, 10 ft [2 m] .....	242811-7