

Auto-Ohm 100

DC Micro-ohm Meter



Vanguard Instruments Company

Accurately

- Inexpensive
- Reliable
- Lightweight
- Easy to Use

RS-232C Interface
High Current Warning LED
Built-in Circuit Breaker
Backlit LCD Display (2-line by 16-Character)
Function Control Knob
Sensing Lead Connector
Current Lead Connector



Auto-Ohm 100 Series 2

The Auto-Ohm 100 Series 2 is a microprocessor-based, third-generation, true DC micro-ohmmeter. It is designed for testing EHV circuit-breaker contact resistance, bushing contact joints, or for any low-resistance measurement. The Auto-Ohm 100 accurately measures resistances ranging from 1 micro-ohm to 300 milliohms.

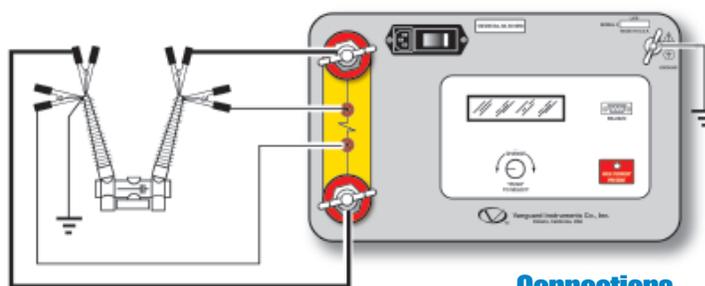
The Auto-Ohm 100 meter applies a true DC current from 10A to 100A to the resistance load to be tested. The user can select any test current setting by rotating a dial on the front panel. Using a switching DC power supply and a current regulator circuit, the Auto-Ohm 100 controls the test current's rise and fall rates.

Since a true-DC ramped current passes through the breaker contacts, no magnetic transient is induced into the breaker's current transformer. Thus, risk of inductively tripping a breaker control (bus differential relay) is non-existent. The readout is directly in micro-ohms or milliohms. No calculations are required to compensate for lead resistances when using the Auto-Ohm 100 meter.

The test current and micro-ohm readout displays on a 2-line by 16-character backlit LCD. The readout is saved and displayed on the LCD until the next reading is initiated. The last three resistance readings are stored and can be displayed on the LCD. An RS-232C serial interface port is also provided for computer diagnostic test.

The Auto-Ohm 100 is supplied with two 30-foot current cables and two 30-foot voltage sensing cables. Both cables are terminated with quick disconnect clips. Heavy duty welding type C-clamps are available as an optional accessory, which allows the user to connect test cable leads to a wide variety and size of bushings, bus-bars, and other conductors requiring low-resistance test contacts.

The Auto-Ohm 100 power supply is thermally protected. Test duration is selectable from 5 seconds to 60 seconds.



Connections

FEATURES

- 10 TO 100 AMPERES TRUE CONTINUOUS DC CURRENT
- AUTOMATIC CONTROL OF CURRENT RISE AND FALL TIME
- DIGITAL RESISTANCE READING FROM 1 MICRO-OHM TO 300 MILLIOHMS
- STORE AND DISPLAY LAST 3 READINGS
- WEIGHT IS LESS THAN 15 LBS



Accessory Clamps

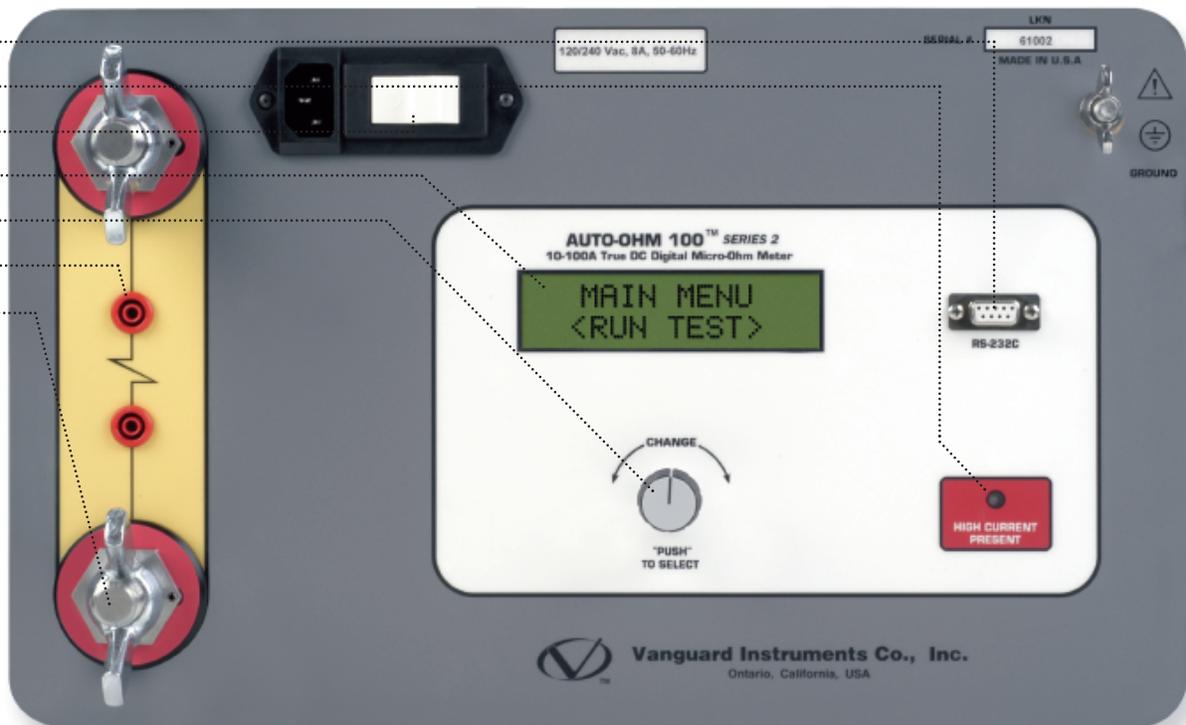
Ordering Information

Auto-Ohm 100 Series 2 True DC Micro-ohmmeter

AUTO-OHM 100 S2 & 30-ft Test Cable	Part No: AUTO-OHM 100 S2
AUTO-OHM 100 S2 Carrying Case	Part No: AUTO-OHM 100 S2 Case
15-foot Test Cable	Part No: AUTO-OHM S2 Cable-15ft
30-foot Test Cable	Part No: AUTO-OHM S2 Cable-30ft
C-Clamp Set (2 clamps)	Part No: AUTO-OHM S2 C-Clamps 30ft

True DC Micro-ohmmeter

Measure *Resistance from 1 Micro-ohm to 300 Milliohms*



SPECIFICATIONS

TYPE	Special-purpose test equipment, portable, micro-ohmmeter
PHYSICAL SPECIFICATIONS	16.8" by 12.6" by 12.0" (42.7 cm x 32.0 cm x 30.5 cm), Weight: Less than 15 lbs (6.8 kg)
INPUT POWER	90-240 Vac, 50/60 Hz
RESISTANCE READING RANGE	1 micro-ohm to 300 milliohm
ACCURACY	±1% reading, ± 1 count
TEST CURRENT RANGE	10 Amperes to 100 Amperes, Selectable
DISPLAY	Backlit LCD, 1-inch height, 2 lines by 16 characters
TEST RECORD STORAGE	Store and display last 3 readings
COMPUTER INTERFACE	RS-232C, 19,200 Baud (Factory Calibration and Diagnostic)
SAFETY	Designed to meet IEC61010 (1995), UL61010A-1, CSA-C22.2
ENVIRONMENT	Operating: -10°C to 50° C (15°F to +122° F); Storage: -30° C to 70° C (-22°F to +158° F)
CABLES	30-foot (#1AWG) Current Cables & Sensing Cables
OPTIONS	Transportation Case
WARRANTY	One Year Parts & Labor, Post Warranty Service Contract Available

Note: The above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice.

Vanguard Instruments Company
Reliability Through Instrumentation

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