



4014 Wide Range Ohmmeter

The 4014 Wide Range Digital Ohmmeter spans nine decades of resistance from 100 $\mu\Omega$ resolution on the 2 Ω range to 200M Ω full scale. A dual range preamp provides stable readings in noisy environments.

Features:

- ✓ Four Wire Kelvin Remote Sensing
- ✓ Optional Hi-Low BCD Comparator
- ✓ 4 ½ Digit Resolution (19,999 counts)
- ✓ 0.02% Accuracy to 200 K Ω , 0.1% - 20M Ω
- ✓ 9 Resistance Ranges from 2 Ω to 200M Ω
- ✓ 100 $\mu\Omega$ resolution on the 2 Ω Range
- ✓ Optional Talker IEEE-488 Interface
- ✓ Optional RS232C I/O or Centronics printout



4100ATC Ohmmeter

Combines 10 $\mu\Omega$ resolution with Automatic Temperature Compensation (ATC) to offer an economical low level ohmmeter. Uses include temperature rise determination or baseline winding resistance measurements in motors, transformers, and copper materials. **Copper and aluminum materials** exhibit approximately a 4% change in resistance for a 10°C change in temperature. ATC mode automatically corrects for the dramatic effect ambient temperature variances have on the resistance of a copper and aluminum conductors.

Features:

- ✓ Four Wire Kelvin Remote Sensing
- ✓ Optional Hi-Low BCD Comparator
- ✓ 4 ½ Digit Resolution (19,999 counts)
- ✓ 0.02% Accuracy
- ✓ 10 $\mu\Omega$ resolution on the 200m Ω Range
- ✓ Optional Talker IEEE-488 Interface
- ✓ Optional RS232C I/O or Centronics printout
- ✓ Automatic Temp. Compensation (CU & AL)



4150ATC Digital Micro-Ohmmeter

Combines all the features of the 4100ATC with a high gain pre-amp, to provide higher resolution (1 $\mu\Omega$) measurements with 100 times less power dissipation in the test item. The 4150ATC is ideal for testing thermistors, RTD's, strain gauges, Balco sensors, and other transducers where minimizing self heating is critical during product calibration. Excellent tool for component testing, matching & sorting of resistors, chokes, coils, transformers, heating elements, plated thru holes, etc.

Features:

- ✓ Four Wire Kelvin Remote Sensing
- ✓ 1 $\mu\Omega$ resolution on the 20 m Ω range
- ✓ 4 ½ Digit Resolution (19,999 counts)
- ✓ 0.03% Accuracy
- ✓ 20 mV fullscale provides 1 μV sensitivity
- ✓ Optional Talker IEEE-488 Interface
- ✓ Optional RS232C I/O or Centronics printout
- ✓ Automatic Temp. Compensation (CU & AL)
- ✓ Optional High-Low BCD Limit Comparator.



4165 Contact Resistance Ohmmeter

The Valhalla 4165 (50mV clamp) and 4165-1344 (20mV clamp) provide six push button ranges from 200m Ω to 20 K Ω . An active electronic voltage clamp limits the open circuit voltage associated with the test leads to insure compliance with a "dry" contact resistance determination. Either unit is designed to satisfy testing to MIL-S-83504 and MIL-S-22710.

Features:

- ✓ Four Wire Kelvin Remote Sensing
- ✓ 10 $\mu\Omega$ resolution on the 200 m Ω range
- ✓ 4 ½ Digit Resolution (19,999 counts)
- ✓ 0.02% Accuracy
- ✓ 4165- provides 50 mV dry contact
- ✓ 4165-1344 provides 20 mV dry contact
- ✓ Optional Talker IEEE-488 Interface
- ✓ Optional RS232C I/O or Centronics printout
- ✓ Optional Kelvin clips, mini & microprobes
- ✓ Optional High-Low BCD Limit Comparator.



4300B Digital Micro-Ohmmeter

Valhalla's top of the line digital micro-ohmmeter, the 4300B has six selectable current levels (0.1 mA to 10 Amps). The lowest range is 2 milliohms with 0.1 micro-ohm resolution. The 4300B is ideal for testing low bonding resistance, winding resistance, heat rise determinations, and any low resistance characteristics related to motors, KVA transformers, fuses, circuit breakers, generators, ballasts, weld joints, utility switchgear and more.

When measuring winding resistance on large inductors, the 4300B has a charging inductor boost mode & safety status disconnect LEDs for user convenience.

Features:

- ✓ Four Wire Kelvin Remote Sensing
- ✓ Automatic Temp. Compensation (CU & AL)
- ✓ Ultra-low 2 m Ω range - 0.1 $\mu\Omega$ resolution
- ✓ 4 ½ Digit Resolution (19,999 counts)
- ✓ 0.03% Accuracy
- ✓ User Selectable Test Current (to 10 Amps)
- ✓ Test Current On/Off Switch
- ✓ Boosted compliance mode for Rapid Charging of large inductors & Safety Disconnect
- ✓ Optional Talk/Listen IEEE-488 Interface



Ohmmeter Options and Accessories

- There are 7 different four wire Kelvin cable sets available for all Valhalla Ohmmeters. Copper and Aluminum Temp. Compensators are available for the ATC models and the 4300B. GPIB, RS232C and Centronics parallel resistance printout capabilities are optionally available on most Valhalla Ohmmeters (except 4314 & 4020).
- ✓ Option "K" Gold 4-Wire Kelvin Clip Lead Set
 - ✓ "MP-1" Kelvin MiniProbe, "MP-2" Miniprobe
 - ✓ "KL" Large (JAWS) Heavy Duty Kelvin Leads
 - ✓ "MP-4 & 5" Kelvin Surface Probes
 - ✓ Option "CU" Copper (ATC) Compensator