

High Resistance/ Low Conductance Meter

Model: HR2

a measurable difference...

IDM[®]
instruments

The High Resistance Meter measures resistance in nine ranges from 1 ohm to 1.9999 Tera ohms (1.9999×10^{12} ohms), and conductance in a single range of 0.00 to 199.99 pS (pico siemens, or pico mhos), all at low voltage of < 2 volts across the sample. Basic accuracy is +/- 2% of reading +/- 1 count. For resistance higher than 1.9999 Tera ohms, the conductance range can be used to measure conductance down to 0.01 pS (100 T ohms).

The meter has a conductance range because samples with simultaneously high resistance and high capacitance settle faster to their final value on conductance (usually under one second), than on resistance (several seconds), and conductance is also capable of detecting higher resistance than the resistance ranges can.

Resistance ranges are 19.999 K ohms (minimum digit represents single ohms), 199.99 K ohms, 1999.9 K, 19.999 M, 199.99 M, 1999.9 M, 19.999 G, 199.99 G, and 1999.9 G ohms. The single conductance range is 199.99 pS. There are two offset controls; one control sets the "zero" for resistance, which is determined while the terminals are shorted together. When set correctly, all nine ranges will read zero, and this control will generally never need to be altered.

Applications:

- Various

Specifications:

- Measures resistance in 9 ranges from 19.999 K ohms to 1999.9 G ohms. Accuracy: $\pm 2\%$ of the reading ± 1 count.
- The 9 measurement currents are 100 micro amps down to 1 pico amp in factors of 10.
- Measures conductance in one range: 199.99 pico siemens. Accuracy is $\pm 2\%$ of reading ± 1 count.
- Battery: standard 9 Volt type, with "LOW BATTERY" appearing on the display when approximately one hour of battery life remains. Battery life is about 50 hours using an alkaline, and 25 hours using a regular battery.
- Includes Calibration Certificate
- Comes with conductive box (reduces interference) and 2 short clips
- Warranty for this meter is one year

