



The Keithley 580 Micro-ohmmeter with optional battery power is discontinued and no longer available for sale. Applications for the 580 included contact resistance measurements and also bonding resistance measurements like those done in the aerospace industry.

Below are alternative products that Keithley offers for performing low resistance measurements. Note that Range Accuracy is the dominant source of error for measurements at the low end of the full-scale range.

Keithley Model	Lowest Range FS	Resolution	Range Accuracy 90-day	Description
DMM6500	1 Ω	1 μΩ	±200 μΩ	6½-digit graphical DMM, half rack
3706	1 Ω	0.1 μΩ	±80 μΩ	7½-digit DMM + switching, full rack
2750	1 Ω	1.0 μΩ	±40 μΩ	6½-digit DMM + switching, full rack
2010	10 Ω	1.0 μΩ	±90 μΩ	7½-digit low-noise DMM, half rack
2001	20 Ω	1.0 μΩ	±140 μΩ	7½-digit high precision DMM, half rack
2002	20 Ω	0.1 μΩ	±120 μΩ	8½-digit high precision DMM, half rack

Perhaps the best solution for low-ohms measurement is Keithley’s 6220/2182A Current Source/Nanovoltmeter integrated system. Test current is fully programmable up to 100 mA. The 6220/2182A combination will automatically perform current-reversal Delta Mode measurements, which can reduce measurement noise by a factor of 1000. Milli-ohm measurements can be made with resolution down to 10 nΩ and single-digit micro-ohm accuracy. Software for measurement and graphical presentation of differential conductance is also provided. Pricing for the 6220/2182A combination is roughly similar to the 2002. If device heating is a concern, the 6221/2182A combination offers a 50 μs source/measure pulse mode at slightly higher cost. Visit [tek.com/keithley](http://tek.com/keithley) to learn more.

The active Keithley models mentioned in this document use line power only, i.e., no optional battery power pack is available.

The Keithley 5804, 5805, 5806 are Kelvin test lead sets that are still available and are typical accessories ordered with any of the active Keithley DMM models mentioned in this document.

