

## **1865 Specified Accuracy**

The resistance accuracy of the 1865 instrument is specified as:

 $\pm [0.45\% + \{(Rx/Vx)(0.0005 * Fs + 2*10^{-12} A) + 30\Omega/Rx\} * 100\%]$ Rx: Measured Resistance in ohms ( $\Omega$ ) Vx: Programmed voltage in volts (V) Fs: Full scale current range in amperes (A)

The full-scale current ranges (Fs) are 1mA, 100uA, 10uA, 1uA, 100nA, 10nA and 1nA.

To make it easier to determine the specified accuracy three graphs are illustrated in Figures 1, 2 and 3 for voltage levels of 1000V, 100V and 10V respectively.

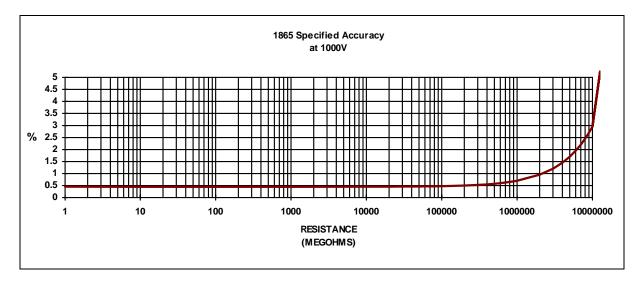
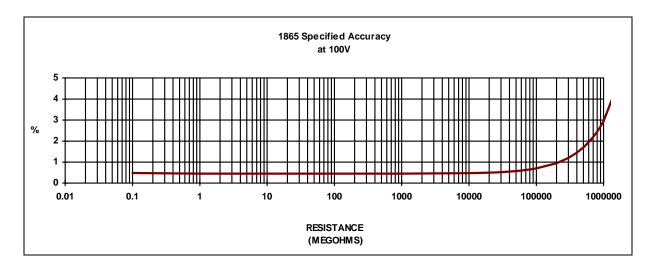


Figure 1: Resistance Accuracy at 1000V

Quickly scanning over the three graphs, a basic resistance accuracy of 0.5% is valid over the 1M $\Omega$  to 500G $\Omega$  range at 1000V; over the 100k $\Omega$  to 50G $\Omega$  range at 100V and over the 100k $\Omega$  to 1G $\Omega$  range at 10V.

## **More Pictures**



**Figure 2: Resistance Accuracy at 100V** 

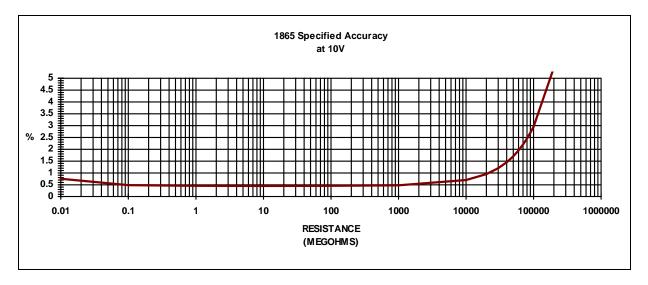


Figure 3: Resistance Accuracy at 10V

For complete product specifications on the 1865 Megohmmeter/IR Tester or any of QuadTech's products, visit us at <u>http://www.quadtech.com/resources/dataindex.html</u>. Do you have an application specific testing need? Call us at 1-800-253-1230 or email applications at <u>jkramer@quadtech.com</u> and we'll work with you on a custom solution. Put QuadTech to the test because we're committed to solving your testing requirements.

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