

Series

1880 Milliohmmeter

Low Resistance Meter

USES:

- Production Testing for Contact Resistance of Switches, Relays, Connectors, Cables, Printed Circuit Boards and Other Low Resistance Devices
- Component Testing of Resistors, Motors, Fuses, Squibs and Heating Elements
- Incoming Inspection and Quality Assurance Testing
- Conductivity Evaluations in Product Design

FEATURES:

- Measurement Range, 1 μohm to 2 Mohm
- 1 μA to 1 A, Constant Current
- 0.05% Measurement Accuracy
- Measurement Speed of 5/second
- Easy to Read Digital Display
- Four-Terminal Kelvin Connections
- Automatic Zeroing
- Built-in Comparator for Go/NoGo Testing
- Display of % Deviation from Nominal
- Auto Ranging
- Remote Control Interface
- Optional IEEE-488 Interface

Introduction

The 1880 Milliohmmeter provides ease of use, digital display and excellent accuracy for performing low resistance measurements on switches, relays, connectors and a variety of other devices. The instrument offers a wide measurement range, from 1 μohm to 2 Mohms, with constant current ranging from 1 A to 1 μA . A built-in comparator makes the unit ideal for go/nogo testing in a production environment and is also adaptable for use in automated system applications with its optional IEEE-488 interface.

Description

Precision Measurements The 0.05% accuracy of the 1880 makes for consistent, reliable test results from this economically priced unit. Nine measurement ranges, automatic or manually selectable, provide wide coverage between 2 Mohms and 1 μohm with constant current between 1 μA and 1 A.

Easy to Use The 1880's auto ranging and digital display means the instrument is ready to begin measuring on power-up, just connect the test device and meaningful results are immediately shown.

Automatic Zeroing The device under test (DUT) is connected to the instrument front panel via a four-terminal Kelvin connection. This, along with the auto zero function for removing any stray resistance, renders very accurate low resistance measurements, independent of the test leads being used.

Go/NoGo Testing A built-in thumb wheel comparator for setting high and low limits provides for fast, simplified, pass/fail testing in a high volume production environment. A nominal value can also be set by the operator, where test results are shown as a positive or negative percent deviation around this value.

Automated Testing For automated system applications, the instrument includes an I/O interface connection with remote start and pass/fail outputs. An optional IEEE-488 interface is also available (or added later), which enables the 1880 to be used under computer control.



For more detailed specifications, visit
www.quadtech.com

For more information about special purchase,
rent & lease options, call

1-800-253-1230
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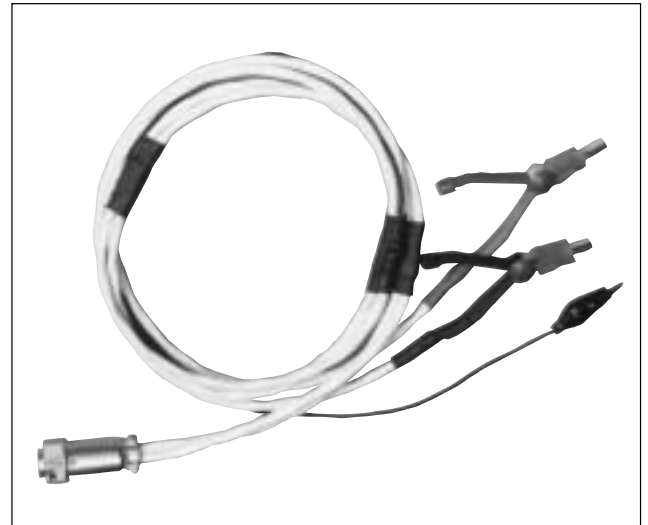


1880 Milliohmmeter

Resistance Range:	Range F.S.	Resolution	Accuracy*	Test I	Clamp V
	20 mohms	1 μ ohm	+/- (0.1% + 1ct)	1A	1.0V
	200 mohms	10 μ ohm	+/- (0.05% + 1ct)	100 mA	1.0V
	2 ohms	100 μ ohm	+/- (0.05% + 1ct)	100 mA	1.0V
	20 ohms	1 mohm	+/- (0.05% + 1ct)	10 mA	1.0V
	200 ohms	10 mohm	+/- (0.05% + 1ct)	1 mA	4.5V
	2 kohms	100 mohm	+/- (0.05% + 1ct)	100 μ A	4.5V
	20 kohms	1 ohm	+/- (0.05% + 1ct)	100 μ A	4.5V
	200 kohms	10 ohm	+/- (0.05% + 1ct)	10 μ A	4.5V
	2 Mohms	100 ohm	+/- (0.05% + 1ct)	1 μ A	4.5V

*18°C – 28°C

Temperature	0 – 18°C and 28 – 50°C	
Coefficient:	+/- (0.25 x applicable accuracy specification)/°C added to accuracy above	
Measure Rate:	2.5 or 5 measurements/sec	
Limit Detection:	High/Low value High/Low % deviation from nominal value	
Display:	Digital: 4 ½ digits, measured resistance 5 digits, % deviation from nominal	
Interfaces:	Handler (standard) IEEE-488 (optional)	
Front Panel	Multi-pin 4-terminal Kelvin connector	
Input Terminals:		
Audible Alarm:	Selectable for Pass or Fail Volume adjust	
Mechanical:	Bench mount with tilt bail	
Dimensions:	(w x h x d): 10.5 x 5 x 14in 270 x 120 x 350mm	
Weight:	11 lbs (5kg) net, 17 lbs (8kg) shipping	
Environmental:	Operating:	0 to +50°C
	Storage:	-20°C to +70°C
	Humidity:	<85%
Power:	115 or 230V AC	50/60 Hz
	25 W maximum	



1880-50 Kelvin Clip Lead Set (included standard with instrument)

Ordering Information

1880-00 Milliohmmeter	Optional Accessories	1880-52	Test Fixture & Cable Set (radial/axial lead components)
Includes:			
Instruction manual	1880-01 IEEE-488 Interface (factory installed)	1880-70	IEEE-488 Interface (field retrofit)
Power Cord	1880-50 Kelvin Clip Lead Set (included)		
Kelvin Clip Lead Set (1880-50)	1880-51 Cable Connector		
Calibration Certificate Traceable to NIST			

