B2980C Series Femto / Picoammeter and Electrometer / High Resistance Meter

The world's only graphical picoammeter / electrometer that lets you confidently measure down to 0.01 fA and up to 10 $P\Omega$

Previously intractable measurements enabled

• Best-in-class 2 pA to 20 mA ranges and an internal 1,000 V source enable accurate measurements from 0.01 fA and 10 PΩ.

Graphical viewing, debug, and characterization

- Time-domain view captures transient signal effects and allows the selection of desired measurement data.
- Real-time histogram view provides quick statistical analysis of measurement data.

Great measurement confidence

- Battery operation eliminates AC power noise for cleaner measurements.
- Test setup integrity-checking function and dedicated accessories ensure maximum accuracy.



Key Specifications

Model	Femto / Picoammeter		Electrometer / High-resistance meter	
	B2981C	B2983C	B2985C	B2987C
Measurement resolution	6½ digits	61/2 digits	6½ digits	6½ digits
Current measure	0.01 fA to 20 mA	0.01 fA to 20 mA	0.01 fA to 20 mA	0.01 fA to 20 mA
Minimum range	2 pA	2 pA	2 pA	2 pA
Resistance measure			Up to 10 PΩ	Up to 10 PΩ
Voltage measure			1 μV to 20 V	1 μV to 20 V
Input resistance			> 200 TΩ	> 200 TΩ
Charge measure			1 fC to 2 μC	1 fC to 2 µC
Temperature measurement			Yes	Yes
Humidity measurement			Yes	Yes
Voltage source			Up to ± 1,000 V	Up to ± 1,000 V
Minimum resolution			700 μV	700 μV
Reading rate	20,000 rdg/s	20,000 rdg/s	20,000 rdg/s	20,000 rdg/s
Battery operation		Yes		Yes

B2900 Precision Instrument Family

The B2980C series is a member of the B2900 Precision instrument family, which includes several different source and measurement solutions. More information is available at www.keysight.com/find/B2900



B2900C/CL Series of Source Measure Units (SMUs) for cost-effective source/measurement capabilities



B2960C Series of Low Noise Power Source for ultra-low noise and more sourcing capabilities

Options

Model number	Options	Description	
B2981/83/85/87C	1A7	Calibration + Uncertainties + Guardbanding (Not Accredited)	
	A6J	ANSI Z540-1-1994 Calibration	
	UK6	Commercial calibration certificate with test data	

Key accessories

Model number	Description	
N1412A/B/C	Triaxial cable, 500 V, 1.5 m/3 m/6 m	
N1413A	High resistance meter fixture adapter	
N1414A	High resistance measurement universal adapter	
N1415A	Triaxial to alligator cable, 200 V, 1.5 m	
N1418A	Lithium-ion battery pack for B2983/B2987	
N1424A/B/C	Resistivity cell for N1413 with B2980 Series	
N1428A	Component test fixture for N1413 with B2980 Series	

Productivity tools

Model number	Description	
N1410A	Starter kit for B2985/B2987	

Refer to www.keysight.com/find/B2980 for product details, technical overviews, and other information.

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