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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 4282A

Agilent Keysight 4282A Digital High Capacitance Meter The HP 4282A is a digital high-capacitance meter for large electrolytic and motor-run capacitors. OEM refurbished specification summaries list C from 10 nF to 1 F in 9 ranges, D from 1 to 10, test frequencies 50/60/100/120 Hz with plus or minus 1.5 percent frequency accuracy, 3.5-digit display, and DC voltage measurement 10 V to 1 kV. Incoming inspection and production test of high-value capacitors; combined C, D, and residual voltage checks on electrolytics. The HP 4282A is a digital high-capacitance meter for large electrolytic and motor-run capacitors. OEM refurbished specification summaries list C from 10 nF to 1 F in 9 ranges, D from 1 to 10, test frequencies 50/60/100/120 Hz with plus or minus 1.5 percent frequency accuracy, 3.5-digit display, and DC voltage measurement 10 V to 1 kV. Incoming inspection and production test of high-value capacitors; combined C, D, and residual voltage checks on electrolytics. Selectable 50, 60, 100, and 120 Hz test frequencies



MODEL

**Agilent / Keysight
4282A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

4282A

LISTING

<https://aumictechlabs.com/products/4282a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 4282A is a digital high capacitance meter engineered for precision measurement of inductance, capacitance, and resistance across component testing, quality control, and research environments. This four-terminal LCR meter specializes in high-capacitance measurement - particularly electrolytic and tantalum capacitors - with nine capacitance ranges

spanning 10 nF to 1 F full scale. The instrument delivers four-digit resolution on capacitance readings and three-digit resolution on dissipation factor and DC resistance measurements. Series equivalent circuit representation minimizes lead impedance effects during capacitance and resistance measurements. An integrated DC digital voltmeter extends functionality to DC voltage measurements up to 600 V.

Technical Specifications

Capacitance measurement ranges: 10 nF to 1 F full scale (nine ranges)
Capacitance display resolution: Four-digit
Dissipation factor and DCR display resolution: Three-digit
DC voltage measurement capability: Up to 600 V
Measurement method: Four-terminal configuration
Equivalent circuit representation: Series
Power requirements: 100 V, 120 V, 220 V, or 240 V $\pm 10\%$, 50 Hz or 60 Hz, approximately 70 VA
Operating temperature: 0°C to +50°C
Operating humidity: <90% relative humidity
Dimensions: 425 mm (W) $\times$ 88 mm (H) $\times$ 467 mm (D)
Net weight: 8.8 kg

Key Features

Four-terminal measurement geometry reduces parasitic lead inductance and resistance effects
Extended capacitance range accommodates bulk capacitor testing without range switching
Integrated DC voltmeter eliminates need for separate voltage measurement instrumentation
Series equivalent circuit model suits component characterization for filter and power supply applications

Typical Applications

Production acceptance testing of high-value capacitors
Research and product development of energy storage components
In-circuit component verification and troubleshooting
Characterization of dielectric and electrolytic capacitor behavior

Compatibility & Integration

This is a legacy product. Agilent Technologies discontinued direct sales and support. Operating and Service Manuals remain available through archival channels (4282A Digital High Capacitance Meter Operating and Service Manual, Part Number 04282-90001, Revision January 1982).

4282A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Digital high capacitance meter
Series Family	HP 4282A
Display Digits	3.5
Capacitance Range	10 nF to 1 F
Capacitance Range Count	9 ranges
Dissipation Factor Range	1 to 10
Ohm Farad Function	supported (OF)
Display Modes	C, D, OF, C-D alternating, C-F alternating, DC voltage
Test Frequency	50 Hz, 60 Hz, 100 Hz, and 120 Hz
Test Frequency Accuracy	plus or minus 1.5 percent
Dc Voltage Measurement	10 V to 1 kV
Dc Voltage Supply Range	0 to 100 V in 2 ranges
Dissipation Factor HighCNote	1000 mF to 10 FRange class in OEM summary
Internal Bias	internal voltage supply for DUT bias
Form Factor	benchtop high-capacitance meter
Primary Parameter	capacitance
Secondary Parameter	dissipation factor
Target Dut	high-value electrolytic and power capacitors
Frequency Selection	line-related 50/60 Hz plus 100/120 Hz
Voltage Function	DC voltage measurement of charged capacitors
Range Architecture	nineCranges spanning 10 nF to 1 F
Documentation	HP 4282A digital high capacitance meter operating/service literature

4282A Specifications

PARAMETER	VALUE
Agilent Keysight 4282A Digital High Capacitance Meter	Overview
Applications	Incoming inspection and production test of high-value capacitors; combined C, D, and residual voltage checks on electrolytics.
Key Features	Nine capacitance ranges to 1 F
Technical Specifications	Instrument Type: Digital high capacitance meter

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Option 001: listed on Keysight-Agilent 4282A/001 refurbished configurations	
Notes	
Numeric rows from HP/Agilent 4282A Digital High Capacitance Meter refurbished OEM specification summaries (10 nF-1 F, 9 ranges, 50/60/100/120 Hz plus or minus 1.5 percent, 3.5 digits, 10 V-1 kV DCV). Finer test-voltage and accuracy tables belong on the 4282A operating manual.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.