

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 4285A Precision LCR Meter, 75 kHz to 30 MHz

The 4285A is a precision LCR meter covering 75 kHz to 30 MHz with 100 Hz frequency resolution. It provides 6-digit resolution and multi-parameter impedance measurements for RF components, semiconductors, and materials. It pairs with the 42841A bias current source and protective fixtures for DC-biased inductance work. Operating temperature: 0 C to 55 C class (family literature) Measurement parameters: $|Z|$, $|Y|$, phase, R, X, G, B, L, C, Q, D, ESR, Rp Bias accessory: 42841A (up to 20 A / 40 A systems) Specs from Agilent 4284A/4285A Precision LCR Meter Family technical overview. Confirm installed options and fixtures on the unit.



MODEL

HP / Agilent 4285A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

4285A

LISTING

<https://aumictechlabs.com/products/4285a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 4285A Precision LCR Meter delivers high-accuracy component and material characterization across RF and general-purpose measurement applications. Operating from 75 kHz to 30 MHz with 100 Hz frequency resolution, this benchtop instrument supports 14 measurement parameters including impedance, inductance, capacitance, resistance, quality factor, and dissipation factor. Basic accuracy reaches 0.1% for Z, C, and L measurements, with D accuracy of 0.001. Technical Specifications Measurement Coverage Impedance: 0.01 mΩ to 99.9999 MΩ Capacitance: 0.01 fF to 999.999 μF Inductance: 0.001 nH to 99.9999 H Admittance:

0.01 nS to 99.9999 S Quality Factor (Q): 0.01 to 99999.9 Phase Angle: -180.000° to 180.000°
Signal Generation Frequency Range: 75 kHz to 30 MHz at $\pm 0.01\%$ accuracy Voltage: 5 mVrms to 2 Vrms (normal mode); 10 mVrms to 1 Vrms (constant mode) Current: 200 μ Arms to 20 mArms (normal); 100 μ Arms to 20 mArms (constant) Measurement Time: 30 ms, 65 ms, or 200 ms per measurement DC Bias Internal DC Bias Option: $\pm(1 \text{ mV to } 40 \text{ V})$ at $\leq 100 \text{ mA}$ with 0.1% accuracy External Bias Current Source Option: 0.01 A to 10 A DC Power & Environment Supply: 100/120/220 Vac $\pm 10\%$, 240 Vac $+5\%/-10\%$; 47–66 Hz Consumption: 200 VA maximum Operating Temperature: 0° to 55°C ; Humidity: $<95\% \text{ RH}$ Dimensions: 426 mm W $\times$ 177 mm H $\times$ 498 mm D Weight: 16 kg (35.2 lb)Key Features 14 measurement parameters including Rs, Rp, reactance, susceptance, and deviation High-speed 30 ms measurement capability for production throughput Precision test signal generation with voltage and current mode flexibility Optional power amplifier: 5 mVrms to 20 Vrms, 50 μ Arms to 200 mArmsCompatibility & Integration GPIB interface for automated test system integration Handler interface options (201/202) for component handler connectivity Scanner interface option (301) for multi-point testing

Features & description

From manufacturer datasheet

Features

• 75 kHz to 30 MHz with 100 Hz steps • Six-digit measurement resolution • Multi-parameter sets including $|Z|$, $|Y|$, L, C, R, D, Q, ESR • Compatible with 42841A bias current source • Short/medium/long integration times

Applications

• RF component L/C/R characterization to 30 MHz • Semiconductor and materials impedance • DC-biased inductance with 42841A systems • Automated production test via GPIB

4285A Characteristics / Specifications

PARAMETER	VALUE
Model	4285A
Manufacturer	HP / Agilent
Instrument Type	Precision LCR Meter
Alias	4285A; Agilent 4285A; HP 4285A; Keysight 4285A
Test frequency	75 kHz to 30 MHz
Frequency resolution	100 Hz
Basic accuracy class	0.1%
Display resolution	6 digits
Test signal voltage range	5 mVrms to 2 Vrms
Test signal current range	200 uArms to 20 mArms
Output impedance class	100 ohm (frequency-dependent tolerance in datasheet)
Power requirements	100/120/220 V +/-10%, 240 V +5%/-10%, 47 to 66 Hz
Power consumption	200 VA
Operating temperature	0 C to 55 C class (family literature)
Measurement parameters	$ Z $, $ Y $, phase, R, X, G, B, L, C, Q, D, ESR, Rp
Bias accessory	42841A (up to 20 A / 40 A systems) Notes Specs from Agilent 4284A/4285A Precision LCR Meter Family technical overview. Confirm installed options and fixtures on the unit.

4285A Specifications

PARAMETER	VALUE
HP / Agilent 4285A Precision LCR Meter	Overview
Applications	- RF component L/C/R characterization to 30 MHz
Key Features	- 75 kHz to 30 MHz with 100 Hz steps
Technical Specifications	Model: 4285A
Notes	Specs from Agilent 4284A/4285A Precision LCR Meter Family technical overview. Confirm installed options and fixtures on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 55 C class (family literature)
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Measurement parameters	Z , Y , phase, R, X, G, B, L, C, Q, D, ESR, Rp
Bias accessory	42841A (up to 20 A / 40 A systems) Notes Specs from Agilent 4284A/4285A Precision LCR Meter Family technical overview. Confirm installed options and fixtures on the unit.

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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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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.