

Display

LCD dot-matrix display: displays measured values, control settings, comparator limits and decisions, list sweep tables, self-test messages, and annunciators.

Correction Function

Zero OPEN/SHORT: Eliminates measurement errors due to the test fixture's stray parasitic impedance.

Load: Improves measurement accuracy by using a calibrated device as reference.

List Sweep Function

A maximum of ten frequencies or test signal levels can be programmed. Single or sequential testing can be performed. When Option 001 is installed, dc voltage bias testing can also be performed.

Comparator

Ten-bin sorting for the primary measurement parameter. IN/OUT for the secondary measurement parameter.

Bin Count: 0 to 999999

List Sweep Comparator: HIGH/IN/LOW decision output for each measurement point in the list sweep table

Other Functions

STORE/LOAD: Ten instrument setups can be stored/ loaded from the internal non-volatile memory. Ten additional setups can also be stored/loaded from a memory card.

HP-IB: All instrument control settings, measured values, comparator limits, list sweep table, and self-test results.

Memory: The memory buffer can store a maximum of 128 measurement results and output the data over HP-IB, ASCII, and 64-bit binary data formats.

General Specifications

Power Requirements: 100/120/220 V \pm 10%, 240 V 5%/-10%, 47 to 66Hz

Power Consumption: 200 VA max.

Operating Temperature and Humidity: 0° to 55° C, \leq 95% RH at 40° C

Size: 426 mm W x 177 mm H x 498 mm D (16.77 in x 6.97 in x 19.61 in)

Weight: Approximately 16 kg (35.2 lb)

Accessories

HP 42841A Bias Current Source

Bias Current Output: (23 \pm 5° C): 0.01 A-20.0 A

Basic Impedance Accuracy: 1% when used with the HP 4284A/ 4285A (1 kHz to 1 MHz)

Interface: Custom, directly controllable by the HP 4284A/4285A with Option 002

HP 42842A/B Bias Current Test Fixture

Used with the HP 4284A and HP 42841A for high dc bias current measurements

HP 42842A: 20 A max.

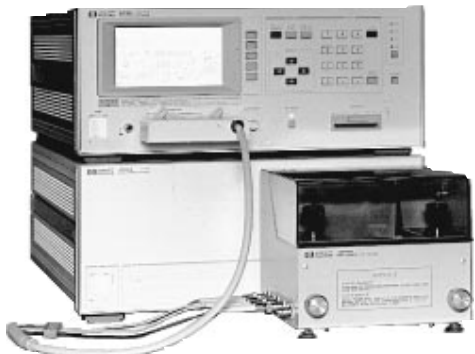
HP 42842B: 40 A max.

HP 42842C Bias Current Test Fixture

Used with the HP 4285A and HP 42841A for high dc bias current measurement. 10 A max.

HP 42843A Bias Current Cable

Used with the HP 4284A, HP 42841A (2 units), and HP 42842B for 40 A maximum applications



HP 4284A with HP 42841A and HP 42842A

HP 42851A Precision Q Adapter

Used with the HP 4285A for resonant Q measurements

Parameters Measured: Q-L, Q-C

Q Measurement Range: 5.00 to 999.99

Basic Q Accuracy: 5%

Measurement Time: 75 ms to 1.5 s

Interface: Custom, directly controllable by the HP 4285A with Option 002

Option 001: SMD Text Fixture



HP 4285A with HP 42851A

Key Literature

HP 4284A/HP 4285A/HP 4286A Precision LCR Meter Family Data Sheet, p/n 5963-5391E

HP 4284A Technical Data, p/n 5963-5390E

HP 4285A Technical Data, p/n 5963-5395E

LCR Meters, Impedance Analyzers and Test Fixtures Selection Guide, p/n 5952-1430

Ordering Information

HP 4284A Precision LCR Meter

HP 4285A Precision LCR Meter

Opt 001 Power Amplifier/DC Bias (HP 4284A)
DC Bias (HP 4285A)

Opt 002 Bias Current Interface (HP 4284A)
Accessory Control Interface (HP 4285A)¹

Opt 006 2m/4m Cable Length Operation (HP 4284A only)

Opt 009 Delete Operation Manual

Opt 109 Delete HP-IB Interface

Opt 201 General-Purpose Handler Interface

Opt 202 Handler Interface

Opt 301 Scanner Interface

Opt W30 Extended Repair Service (see page 592)

HP 4284A

HP 4285A

HP 42841A Bias Current Source

HP 42842A Bias Current Test Fixture (20 A max.)

HP 42842B Bias Current Test Fixture (40 A max.)

HP 42842C Bias Current Test Fixture (10 A max.)

Opt 001 SMD Test Fixture (HP 42842C only)

HP 42843A Bias Current Cable

HP 42851A Precision Q Adapter

Opt 001 SMD Test Fixture

¹Options 001 and 002 do not operate simultaneously.

Refer to page 344 for accessories (fixtures, cables, etc.).