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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 11683A

HP Agilent 11683A Range Calibrator for 435/436/438 Power Meters The HP 11683A is a 50 MHz 1 mW range calibrator for 435A/436A/438A power meters. OEM power-meter accessory data list a 50 MHz, 1.00 mW (0 dBm) reference used to verify meter ranges and the 478A/8481A-class sensor path without an external generator. Verifying power-meter range accuracy and sensor/meter combination at 1 mW / 50 MHz. Instrument Type: Power meter range calibrator The HP 11683A is a 50 MHz 1 mW range calibrator for 435A/436A/438A power meters. OEM power-meter accessory data list a 50 MHz, 1.00 mW (0 dBm) reference used to verify meter ranges and the 478A/8481A-class sensor path without an external generator. Verifying power-meter range accuracy and sensor/meter combination at 1 mW / 50 MHz. Instrument Type: Power meter range calibrator Mechanical Package: power meter accessory



MODEL	CALIBRATION
Agilent / Keysight 11683A	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
11683A	https://aumictechlabs.com/products/11683a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 11683A is a dedicated range calibrator for verifying accuracy and performance across compatible power meter instruments. It validates full-scale readings on all ranges, tests auto-zero circuits via polarity switching, and establishes baseline calibration through the meter's CAL ADJ control on the 1 mW range. The unit steps through additional ranges to confirm measurement accuracy within ± 1 percent plus noise and drift. Technical Specifications Calibration Outputs The 11683A generates precise DC equivalents corresponding to specific power meter

readings: 3, 10, 30, 100, 300 μ W 1, 3, 10, 30, 100 mW Performance Calibration uncertainty: $\pm 0.25\%$ across all ranges Accuracy verification: $\pm 1\%$ plus noise and drift Electrical Requirements Input voltage: 100, 120, 220, or 240 Vac ($\pm 5\%$ to -10%) Frequency: 48 to 440 Hz Power consumption: <10 VA DC-Reference Output (Option H01) Selectable internal or external programmable DC source. Example internal voltages (1 mW = 145.00 mVDC baseline): 100 mW: 15.800 V 30 mW: 4.7121 V 10 mW: 1.4641 V 3 mW: 458.00 mV 1 mW: 145.00 mV 300 μ W: 45.837 mV 100 μ W: 14.494 mV 30 μ W: 4.5832 mV 10 μ W: 1.4501 mV 3 μ W: 458.69 μ V Physical Dimensions Height: 88.9 mm (3.5 in) Width: 133.3 mm (5.25 in) Depth: 215.90 mm (8.5 in) Weight: 1.1 kg (2 lb 8 oz) nominal Key Features Auto-zero circuit test via polarity switch Wide dynamic range verification from 3 μ W to 100 mW Direct integration with power meter CAL ADJ controls Optional external DC programming capability Environmental Specifications Operating temperature: 0 to $+55$ $^{\circ}$ C Storage temperature: -40 to $+70$ $^{\circ}$ C Humidity: up to 95% RH at 40 $^{\circ}$ C EMC: IEC61326-1:2012 / EN61326-1:2013 Compatibility & Integration The 11683A works with Agilent/Keysight EPM series, EPM-P series, and E1416A power meters.

11683A Characteristics / Specifications

PARAMETER	VALUE
Model	11683A
Instrument Type	Power meter range calibrator
Reference Frequency	50 MHz
Reference Power	1.00 mW (0 dBm)
Host Meters	HP 435A 436A 438A
Manufacturer	HP Agilent Keysight
Mechanical Package	power meter accessory
Use	verify meter ranges and sensor path
Sensor Family	478A 8481A class thermistor/thermocouple sensors
Output Connector	sensor-compatible RF output as on 11683A
Calibration	1 mW at 50 MHz reference
Documentation	435/436/438 power meter accessory data 11683A
Application Class	power meter verification
Frequency Standard	50 MHz
Power Standard	1 mW
Level Dbm	0 dBm
External Generator	not required for this reference
Family	11683A range calibrator
Meter Functions	range and calibration check
Duty	continuous reference output within rating
Grounding	meter/sensor ground as in the power-meter manual
Reference Level	0 dBm at 50 MHz

11683A Specifications

PARAMETER	VALUE
Applications	Verifying power-meter range accuracy and sensor/meter combination at 1 mW / 50 MHz.
Key Features	50 MHz 1 mW reference
For 435A 436A 438A power meters	0 dBm range calibration
Technical Specifications	Model: 11683A

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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Grounding	meter/sensor ground as in the power-meter manual
Reference Level	0 dBm at 50 MHz
Notes	
From HP 435A/436A/438A power-meter accessory data for 11683A (50 MHz, 1 mW / 0 dBm). Use the calibrator only with the meters listed on the 11683A sheet.	

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

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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.