

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8487D

The Keysight (Agilent) 8487D is a high-performance diode power sensor designed for measuring average power in RF and microwave systems. Operating over a wide frequency range of 50 MHz to 50 GHz, it covers a power measurement range from -70 to -20 dBm. The sensor features exceptionally low SWR to minimize mismatch uncertainty and comes supplied with a 11708A 30 dB reference attenuator to enable easy calibration against standard 1 mW (0 dBm) 50 MHz power meter reference sources.

SPECIFICATIONS

General

Interfaces	Proprietary 12-pin multi-conductor cable interface
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Physical

Power Supply	Powered by host power meter via sensor cable
Operating Temperature	0 to 55 °C °C

RF and Power Performance

Frequency Range	50 MHz to 50 GHz
Power Measurement Range	-70 dBm to -20 dBm (100 pW to 10 µW)
Sensor Technology Type	Diode power sensing element

Impedance and Mismatch Characteristics

Nominal Input Impedance	50 Ω
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Calibration and Accuracy

Calibration Reference Attenuator	Agilent/Keysight 11708A 30 dB attenuator supplied (required for 0 dBm reference calibration)
Calibration Traceability	Traceable to US National Institute of Standards and Technology (NIST)

Physical and Mechanical Characteristics

RF Input Connector Type	2.4 mm (male)
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System Compatibility and Connectivity

Compatible Power Meters	EPM, EPM-P, P-series, E1416A VXI, legacy 70100A, and discontinued 43X series meters
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Environmental and Compliance

Storage Temperature Range	-40 to +75 °C
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Accessories

Supplied Accessories	11708A 30 dB attenuator
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Performance

Calibration Reference Level	-30 dBm (1 uW) at 50 MHz when used with the supplied 11708A 30 dB attenuator
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Connectivity

Sensor Cable Connector	12-pin bulk receptacle (mates with 11730 series cables)
Compatible Sensor Cables	Keysight 11730 series

TECHNOLOGY

Diode-based power sensing

APPLICATIONS

RF and Microwave Average Power Measurement

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.