

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8482A

The Keysight Technologies (formerly Agilent HP) 8482A is a highly accurate and stable thermocouple RF power sensor designed for measuring average power levels from -30 to +20 dBm (1 μ W to 100 mW) over a wide frequency range of 100 kHz to 4.2 GHz. Known for its exceptional SWR characteristics, it minimizes measurement mismatch uncertainty. It is widely used across calibration labs and RF testing facilities, providing direct traceability to NIST and seamless compatibility with EPM, EPM-P, P-series, and classic 43X series power meters.

SPECIFICATIONS

General

Display	None (results displayed on connected power meter)
Recommended Calibration Interval	1 year

Physical

Power Supply	Powered via sensor cable from connected power meter
Operating Temperature	0 to 55 °C °C

RF Performance Specifications

Frequency Range	100 kHz to 4.2 GHz
Power Measurement Range (dBm)	-30 to +20 dBm
Power Measurement Range (Watts)	1 μ W to 100 mW
Sensor Type	Thermocouple
Maximum SWR (100 kHz to 300 kHz)	1.60
Maximum SWR (2.0 GHz to 4.2 GHz)	1.30
Zero Set (Noise)	< $\pm$ 50 nW
Measurement Noise	< 110 nW

Power Handling and Damage Limits

Maximum Peak Power	15 W (for < 10 μ s)
Maximum Pulse Energy	30 W $\cdot\mu$ s

Physical and Mechanical Characteristics

Input Connector Type	Type-N male
Weight (Net)	0.17 kg (6 oz)

Connectivity and Compatibility

Compatible Power Meter Models	EPM (E4418A/B, E4419A/B, N1913A, N1914A), EPM-P (E4416A, E4417A), P-series (N1911A, N1912A), VXI E1416A, 70100A, 435A/B, 436A, 437A/B, 438A
Cable Interface Type	Keysight 11730 Series power sensor cables

Environmental and Safety Specifications

Operating Temperature Range	0 to 55 °C
Storage Temperature Range	-40 to 75 °C

Metrology and Calibration Reference

Reference Calibration Frequency	50 MHz
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RF Characteristics

Nominal Impedance	50 Ω
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Performance

Measurement Type	True average power
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TECHNOLOGY

Thermocouple RF Power Sensor

APPLICATIONS

RF and Microwave 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.