

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E4413A

The Keysight (formerly Agilent/HP) E4413A is a CW power sensor designed for highly accurate average power measurements over a frequency range of 50 MHz to 26.5 GHz. It delivers a wide 90 dB dynamic range (-70 dBm to +20 dBm) and features integrated EEPROM to store calibration factors, linearity, and temperature compensation data. It is widely used for RF and microwave test applications requiring NIST-traceable accuracy and compatibility with EPM, EPM-P, and P-series power meters.

SPECIFICATIONS

Physical

Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	38 x 30 x 130 mm
Weight	0.2 kg

General Specifications

Product Type	CW Power Sensor
Power Measurement Range	-70 dBm to +20 dBm (100 pW to 100 mW)
Dynamic Range	90 dB
Nominal Impedance	50 Ω

Performance Characteristics

Maximum SWR (50 MHz to <100 MHz)	1.21
Maximum SWR (100 MHz to <8 GHz)	1.19
Maximum SWR (8 GHz to <18 GHz)	1.21
Maximum SWR (18 GHz to <26.5 GHz)	1.26

Measurement Accuracy & Calibration

Internal Data Storage	EEPROM (Stores calibration factors, linearity, and temperature compensation data)
Calibration Traceability	NIST Traceable

Connectivity & Interfaces

RF Input Connector Type	3.5 mm (male)
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Compatibility

Supported Power Meters	EPM, EPM-P, and P-series power meters
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Performance

Maximum Average Power	+23 dBm
Maximum Peak Power	+26 dBm
Zero Set	50 pW
Zero Drift	15 pW
Measurement Noise	110 pW

Environmental

Storage Temperature	-55 to 75 °C
Operating Humidity	Up to 95% relative humidity at 40 °C (non-condensing)
Non-Operating Humidity	Up to 90% relative humidity at 65 °C (non-condensing)
Operating Altitude	Up to 3,000 meters (9,840 ft)
Non-Operating Altitude	Up to 15,240 meters (50,000 ft)

TECHNOLOGY

CW Power Measurement

APPLICATIONS

RF & 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.