KEYSIGHT TECHNOLOGIES (AGILENT HP)

N8481A

The Keysight N8481A is a high-performance thermocouple RF power sensor designed for accurate power measurements over a wide frequency range of 10 MHz to 18 GHz. Featuring excellent linearity, low SWR, and built-in calibration factor EEPROM (or option CFT with printed calibration factors), it offers high reliability and compatibility with EPM, EPM-P, and P-Series power meters.

SPECIFICATIONS

General

Interfaces	Multi-pin sensor cable interface
Display	None (requires host power meter)
Sensor Type	Thermocouple
Recommended Calibration Cycle	1 year
Compatible Sensor Cables	Keysight 11730 series
Maximum Sensor Cable Length	61 m (200 ft)

Physical

Power Supply	Powered directly from compatible power meter
Operating Temperature	0 °C to 55 °C °C

Performance & Measurement Specifications

Frequency Range	10 MHz to 18 GHz
Power Measurement Range	-35 dBm to +20 dBm (300 nW to 100 mW)
Maximum Continuous Wave Power	+25 dBm (300 mW) average
Input Impedance	50 Ω nominal

Accuracy & Calibration

Zero Set	±25 nW
Zero Drift	±3 nW (within 1 hour, at constant temperature after 1-hour warm-up)

Physical & Interface Characteristics

RF Connector	Type-N male, 50 Ω

System Compatibility & Control

Compatible Power Meters	Keysight E4418B, E4419B, N1913A, N1914A, E4416A, E4417A, N1911A, N1912A
EEPROM Calibration Memory	Yes, built-in (stores calibration factors for automatic upload to power meter)

Ordering Information & Options

Option CFT Compatibility	Available (Option CFT provides calibration factor table printed on the sensor body to emulate legacy 8480 series)

TECHNOLOGY

Thermocouple

APPLICATIONS

RF & Microwave Power Measurement