KEYSIGHT TECHNOLOGIES (AGILENT HP)

N1914A

The Keysight (formerly Agilent) N1914A is a versatile, dual-channel EPM Series RF and microwave power meter designed to deliver reliable average power measurements. With the capability to measure power from -70 dBm to +44 dBm and frequencies from 9 kHz to 110 GHz (depending on the connected sensor), it offers significant performance enhancements over legacy models while maintaining strict code compatibility with the widely used E4418B, E4419B, and 438A power meters. When equipped with optional USB host ports, the N1914A's dual-channel architecture can be expanded with two additional U2000 Series USB power sensors, transforming it into a complete 4-channel power measurement solution. It features a modern, high-resolution color display and comprehensive LAN LXI-C, USB, and GPIB connectivity.

SPECIFICATIONS

General

Interfaces	GPIB, LAN (LXI-C), USB (optional USB hosts for sensors)
Display	High-resolution color LCD
Warm-up Time	30 minutes

Physical

Power Supply	90 to 264 VAC (47 to 63 Hz); 90 to 132 VAC (380 to 420 Hz)
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	212.6 x 88.5 x 348.3 mm
Weight	3.7 kg

General Specifications

Number of Channels	2 channels (expandable to 4 with optional USB hosts)
Frequency Range	9 kHz to 110 GHz (sensor dependent)
Power Range	-70 to +44 dBm (sensor dependent)
Compatible Sensor Families	Keysight E-Series, 8480 Series, N8480 Series, and U2000 Series (via USB)

Measurement Performance

Measurement Speed	Up to 400 readings/sec (with E-Series sensors)
Reference Oscillator Frequency	50 MHz
Reference Oscillator Power	1 mW (0 dBm)

Interfaces & Connectivity

Remote Control Interfaces	GPIB, LAN LXI-C, USB
USB Host Ports	Optional (supports up to two U2000 Series sensors)

Display Characteristics

User Interface	Numeric keypad with color display

Performance

Instrumentation Accuracy (Logarithmic)	±0.02 dB
Instrumentation Accuracy (Linear)	±0.5%
Measurement Resolution	1.0, 0.1, 0.01, and 0.001 dB (logarithmic mode); 1 to 4 significant digits (linear mode)
Power Reference VSWR	1.06 maximum @ 50 MHz

Inputs & Outputs

Power Reference Connector	Type-N (female), 50 Ω

Environmental

Storage Temperature	-40 to +70 °C
Operating Altitude	Up to 3000 m (9840 ft)
Operating Humidity	Up to 95% relative humidity at 40 °C (non-condensing)

Power

Battery Operating Time (Option B01)	Up to 12 hours (Lithium-ion)

Compliance

LXI Compliance	LXI Class C

TECHNOLOGY

RF/Microwave Average Power Measurement

APPLICATIONS

RF and microwave average power measurements in aerospace, defense, wireless communications, and general-purpose test applications.