

KEYSIGHT TECHNOLOGIES (AGILENT HP)

N9914A

The Keysight (Agilent HP) N9914A FieldFox is a rugged, portable handheld microwave combination analyzer configured as a cable and antenna analyzer (CAT), vector network analyzer (VNA), and spectrum analyzer. Engineered for harsh field environments, it delivers benchtop-level precision for installing and maintaining satellite, military, radar, and microwave backhaul systems. With a frequency range up to 6.5 GHz, the N9914A features MIL-PRF-28800F Class 2 compliance, a weather-sealed chassis, and a completely fanless design without vents.

SPECIFICATIONS

General

Interfaces	LAN (RJ-45), 2x USB 2.0 Host (Type-A), 1x USB 2.0 Device (Mini-B)
Display	6.5-inch VGA (640 x 480) transfective color LCD with anti-glare and LED backlight
Data Storage	Internal storage, micro SD/SDHC card slot, USB flash drive support
System Impedance	50 Ω (nominal)

Physical

Power Supply	External DC input: 15 to 19 VDC (40 W max); AC/DC adapter: 100 to 240 VAC, 50 to 60 Hz
Operating Temperature	-10 to 55 $^{\circ}\text{C}$
Dimensions (WxHxD)	292 x 188 x 72 mm
Weight	3.0 kg kg

Cable and Antenna Analyzer (CAT) Specifications

CAT Frequency Range	30 kHz to 6.5 GHz
Supported Measurements	Distance-to-fault (DTF), return loss, cable loss

Vector Network Analyzer (VNA) Specifications

VNA Frequency Range	30 kHz to 6.5 GHz
Supported S-Parameters	S11, S21, S22, S12 (magnitude and phase)

Spectrum Analyzer (SA) Specifications

SA Frequency Range	100 kHz to 6.5 GHz (usable to 5 kHz)
Frequency Span Range	0 Hz (zero span), 10 Hz to maximum frequency range
Phase Noise (10 kHz offset)	-111 dBc/Hz
Resolution Bandwidth (RBW) Range	10 Hz to 5 MHz (-3 dB bandwidth)
Amplitude Accuracy	±0.5 dB (at power-up, no warm-up required)
Maximum Safe Input Level	+27 dBm (0.5 W) Average CW / ±50 VDC
Amplitude Scale Units	dBm, dBmV, dBμV, W, V, A, dBmA, dBμA
Trace Detectors	Normal, positive peak, negative peak, sample, average (RMS)
Trace States	Clear/write, max hold, min hold, average, view, blank
Number of Traces	4
Number of Averages	1 to 10,000

Power and Battery Specifications

Battery Operating Time	3.5 hours
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Environmental and Ruggedness

Vibration / Shock Standard	MIL-PRF-28800F Class 2 compliant
Enclosure Features	Completely sealed, compliant with tough field environment standards

Physical Specifications

Form Factor	Vertical (portrait) orientation with glove-compatible buttons
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System Specifications

Optional Built-in Features	Tracking generator, vector voltmeter, power meter, interference analyzer, built-in GPS
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Regulatory and Compliance

Standard Warranty	3-year warranty
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Inputs & Outputs

Test Port Connectors	Type-N (female), 50 Ω
Overvoltage Protection (RF Ports)	±50 VDC

Power

Battery Type	Lithium-ion, 10.8 V, 4.6 Ah
Power Consumption	15 W (typical)

Environmental

Storage Temperature	-51 °C to 71 °C
Battery Charging Temperature	0 °C to 45 °C
Operating Altitude	Up to 9,144 m (30,000 ft)

Compliance

EMC Compliance	IEC/EN 61326-1, CISPR 11 / EN 55011
Safety Compliance	IEC/EN 61010-1

Cable & Antenna Analyzer / VNA

Number of Data Points (CAT / VNA)	101, 201, 401, 601, 801, 1001, 1601, 4001, 10001
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Spectrum Analyzer

Video Bandwidth (VBW)	1 Hz to 5 MHz (1, 1.5, 2, 3, 5, 7.5 sequence)
Preamplifier Range (Option 235)	100 kHz to 6.5 GHz (Full band)
Audio Demodulation	AM, FM Narrowband, FM Wideband (listen via built-in speaker or headphones)

Vector Network Analyzer

IF Bandwidth Settings (VNA)	10 Hz to 100 kHz (1, 3, 10 sequence)
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Options & Accessories

Variable DC Bias Voltage (Option 330)	+1 to +32 V
Variable DC Bias Maximum Current (Option 330)	650 mA
Variable DC Bias Maximum Power (Option 330)	8 W
Built-in GPS (Option 307)	Provides latitude, longitude, elevation, and time data

Real-Time Spectrum Analyzer (RTSA)

Real-Time Bandwidth (Option 350)	Up to 10 MHz
Minimum Signal Duration for 100% POI (Option 350)	12.2 μs

TECHNOLOGY

Handheld Microwave Combination Analyzer

APPLICATIONS

Satellite communications, microwave backhaul, military communications, radar systems, and general field-test environments

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