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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N9950B

Agilent / Keysight N9950B FieldFox Handheld Microwave Analyzer The Keysight (Agilent) N9950B isaFieldFox B-Series handheld combination analyzer. OEM FieldFox B-Series data sheets list frequency coverage 300 kHz to 32 GHz with frequency reference accuracy plus or minus 0.9 ppm (spec) plus aging from minus 10 to 55 C. Cable and antenna test, vector network analysis, spectrum analysis, and field microwave maintenance depending on installed options. FieldFox B-Series combination analyzer platform The Keysight (Agilent) N9950B isaFieldFox B-Series handheld combination analyzer. OEM FieldFox B-Series data sheets list frequency coverage 300 kHz to 32 GHz with frequency reference accuracy plus or minus 0.9 ppm (spec) plus aging from minus 10 to 55 C. Cable and antenna test, vector network analysis, spectrum analysis, and field microwave maintenance depending on installed options. FieldFox B-Series combination analyzer platform GPS-disciplined frequency reference option path



MODEL

**Agilent / Keysight
N9950B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N9950B

LISTING

<https://aumictechlabs.com/products/n9950b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N9950B FieldFox is a handheld microwave analyzer delivering benchtop-grade RF and microwave measurement capability in a field-deployable package. It combines cable and antenna testing, vector network analysis, spectrum analysis, and real-time signal capture in a single instrument, enabling rapid troubleshooting and characterization across frequency ranges

from 9 kHz to 32 GHz. Technical Specifications Frequency Coverage Cable and Antenna Analyzer (CAT): 300 kHz to 32 GHz Vector Network Analysis: 300 kHz to 32 GHz Spectrum Analysis: 9 kHz to 32 GHz Analysis bandwidth: Up to 120 MHz Real-time bandwidth: 120 MHz gap-free System Performance Dynamic range: 105 dB Spectrum analyzer amplitude accuracy: ± 0.2 dB (no warm-up required) Frequency reference: ± 0.9 ppm (spec), ± 0.5 ppm (typical) at -10 to 55 °C; ± 0.010 ppm when GPS-locked Frequency aging: ± 1 ppm/yr over 20 years System impedance: $50\ \Omega$ nominal ($75\ \Omega$ with adapter and calibration) Real-time signal capture: $5.52\ \mu\text{s}$ minimum signal duration at 100% Probability of Intercept IF Bandwidth Options 3 Hz, 10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz, 100 kHz (VNA mode) Key Features Cable and Antenna Analyzer with DTF, return loss, and 1-port cable loss measurements Vector Network Analyzer: 2-port S-parameters (S_{11} , S_{21} , S_{12} , S_{22}) with magnitude and phase; mixed-mode measurements (S_{cc11} , S_{dd11} , S_{cd11} , S_{dc11}) Real-Time Spectrum Analyzer with 120 MHz gap-free capture Time Domain Reflectometry (TDR) for cable fault location Pulse measurements and RF characterization Power meter functionality via USB sensor integration AM/FM analog demodulation Noise figure measurements Frequency counter, vector voltmeter, and interference analyzer Built-in GPS receiver for geolocation and time stamping Over-the-air (OTA) measurements for 5G NR and LTE ECal support and multiple calibration methods (OSL, response, CalReady) Typical Applications Field verification of passive and active RF/microwave components Cable and connector diagnostics Network performance validation and fault isolation 5G and cellular field testing EMI/RFI identification and characterization Antenna pattern and impedance measurement in deployed environments Compatibility & Integration Supports USB power sensors for extended measurement capability. GPS locking available for improved frequency reference stability in field operations.

N9950B Characteristics / Specifications

PARAMETER	VALUE
Model	N9950B
Frequency Range	300 kHz to 32 GHz
Frequency Reference Accuracy Spec	plus or minus 0.9 ppm + aging (minus 10 to 55 C)
Frequency Reference Accuracy Typical	plus or minus 0.5 ppm + aging
Frequency Accuracy Locked To GPS	plus or minus 0.01 ppm
Frequency Accuracy GPS Antenna Disconnected	plus or minus 0.4 ppm nominal
Aging Rate	plus or minus 1 ppm/yr for 20 years (spec) will not exceed plus or minus 3.5 ppm
Frequency Resolution 30 kHz To 1.91211 GHz	0.67 Hz
Frequency Resolution 1.91211 To 3.82461 GHz	1.34 Hz
Frequency Resolution 3.82461 To 7.64961 GHz	2.68 Hz
Frequency Resolution 7.64961 To 15.29961 GHz	5.36 Hz
Frequency Resolution 15.29961 To 26.5 GHz	10.73 Hz
Frequency Resolution 26.5 To 45.8 GHz Class	16.09 Hz (N995xB)
Frequency Resolution 45.8 To 54 GHz Class	32.19 Hz (N995xB)
Data Points Class	101 to 10001 points including 4001 and 10001
IF Bandwidth Class VNA	3 Hz to 100 kHz stepped set
System Impedance	50 ohm nominal
Platform	FieldFox B-Series handheld analyzer
Battery Operation	yes
Operating Temperature Class	minus 10 C to 55 C FieldFox class

PARAMETER	VALUE
Connectivity Class	USB and LAN
Brand Lineage	Agilent / Keysight
Instrument Type	FieldFox combination analyzer CAT VNA SA
Bandwidth	Class VNA: 3 Hz to 100 kHz stepped set
Operating temperature	Class: minus 10 C to 55 C FieldFox class

N9950B Specifications

PARAMETER	VALUE
Key Features	Frequency coverage 300 kHz to 32 GHz
Technical Specifications	Model: N9950B
Notes	From Keysight FieldFox B-Series Handheld Analyzers data sheet model row for N9950B.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: minus 10 C to 55 C FieldFox class
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Operating Temperature Class	minus 10 C to 55 C FieldFox class
Connectivity Class	USB and LAN
Brand Lineage	Agilent / Keysight
Instrument Type	FieldFox combination analyzer CAT VNA SA Notes From Keysight FieldFox B-Series Handheld Analyzers data sheet model row for N9950B.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER

VALUE

Instrument Type

FieldFox combination analyzer CAT VNA SA

Notes

From Keysight FieldFox B-Series Handheld Analyzers data sheet model row for N9950B.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.