

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N9951B

Agilent / Keysight N9951B FieldFox Handheld Microwave Analyzer The Keysight (Agilent) N9951B isaFieldFox B-Series handheld combination analyzer. OEM FieldFox B-Series data sheets list frequency coverage 300 kHz to 44 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) N9951B isaFieldFox B-Series handheld combination analyzer. OEM FieldFox B-Series data sheets list frequency coverage 300 kHz to 44 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
N9951B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N9951B

LISTING

<https://aumictechlabs.com/products/n9951b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N9951B FieldFox is a handheld microwave combination analyzer engineered for field deployment in aerospace, defense, and wireless communications environments. This ruggedized 3.4 kg instrument integrates spectrum analysis, cable and antenna testing, and power measurements into a single platform. The N9951B operates across 9 kHz to 44 GHz (spectrum analysis) and 300 kHz to 44 GHz (cable/antenna), with optional vector network analysis extending

capability to 44 GHz. The base unit delivers spectrum measurements accurate to ± 0.2 – 0.3 dB without warm-up and supports real-time bandwidth to 120 MHz gap-free analysis. Built-in ports number two; system dynamic range reaches 105 dB.

Technical Specifications

Physical & Environmental Weight: 3.4 kg (7.4 lb) Operating temperature: -10 to $+55$ °C IP rating: IP53 per IEC/EN 60529 Ruggedness: MIL-PRF-28800F Class 2 and MIL-STD-810G Method 511.5 for explosive environments Frequency Coverage Spectrum analyzer: 9 kHz to 44 GHz Cable/antenna analyzer: 300 kHz to 44 GHz Over-the-air analysis: 1 MHz to 44 GHz (usable to 5 kHz)

Measurement Performance Spectrum analysis accuracy: ± 0.2 – 0.3 dB (no warm-up required) Real-time bandwidth: 120 MHz gap-free Minimum signal duration for 100% POI at full amplitude: 5.52 μ s VNA dynamic range: 105–115 dB (optional)

Key Features Two-port vector network analysis with simultaneous S-parameter measurement (optional) Cable and antenna testing with DTF, return loss, and VSWR measurements Built-in time-domain reflectometry (TDR) via option Over-the-air capabilities for 5G NR and LTE Optional noise figure measurements Independent signal generator Integrated GPS/GNSS receiver for geolocation and timestamping Calibration methods: CalReady, OSL, Response, Enhanced Response Vector voltmeter functionality

Typical Applications Field RF and microwave testing Cable and transmission line characterization Antenna performance verification 5G signal analysis Interference detection and analysis Network parameter verification in aerospace and defense

Compatibility & Integration The N9951B accepts software options to enable advanced functions including vector network analysis, time-domain reflectometry, pulse measurement, and extended-range transmission analysis. Analog demodulation and spectrogram capabilities are available through configuration. The instrument's dual-port architecture supports mixed-mode S-parameter measurements and vector voltmeter operation.

N9951B Characteristics / Specifications

PARAMETER	VALUE
Model	N9951B
Frequency Range	300 kHz to 44 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

N9951B Specifications

PARAMETER	VALUE
Key Features	Frequency coverage 300 kHz to 44 GHz
Technical Specifications	Model: N9951B
Notes	From Keysight FieldFox B-Series Handheld Analyzers data sheet model row for N9951B.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: minus 10 C to 55 C FieldFox class
Operating Temperature	Class: minus 10 C to 55 C FieldFox class
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 N9951B.

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	
Specifications	
PARAMETER	VALUE
Model	N9951B
Frequency Range	300 kHz to 44 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
Connectivity Class	USB and LAN
Brand Lineage	Agilent / Keysight

PARAMETER	VALUE
-----------	-------

Instrument Type	FieldFox combination analyzer CAT VNA SA
-----------------	--

Notes

From Keysight FieldFox B-Series Handheld Analyzers data sheet model row for N9951B.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.