Keysight N9923A FieldFox Vector Network Analyzer (VNA)

World's most accurate handheld vector network analyzer

The Keysight Technologies FieldFox VNA is the only handheld network analyzer with QuickCal, a built-in calibration system that eliminates the hassle of carrying a calibration kit into the field. The FieldFox VNA also provides the best measurement stability over temperature and time and is the only handheld network analyzer with full MIL-PRF-28800F Class 2 compliance with no exceptions.



Key measurements

- Full 2-port error corrected network analysis, S11, S21, S12, S22, with both magnitude and phase
- Cable and antenna test (distance-to-fault, return loss, etc.)
- Cable loss measurement (1-port)
- Insertion loss and transmission measurement
- Smith chart and polar display
- Vector voltmeter
- Power meter with external USB power sensor
- Time domain
- Standard 3 year warranty

Key differentiators

- Built-in QuickCal technology enables calibration without a calibration kit.
- Best measurement stability over temperature and time.
- Industry's only handheld network analyzer with full MIL-PRF-28800F Class 2 compliance with no exceptions.
- Superior system dynamic range: 100 dB.
- Easy-to-use, task-driven user interface.
- Weather resistant, compact, field-friendly design, and no fans or vents.



Key specifications

Function	Description
Frequency	2 MHz to 4 GHz / 6 GHz
Directivity	> 42 dB
System dynamic range	100 dB typical
Trace noise	0.01 dB rms
Source power	+5 to -40 dBm
Internal storage	Minimum 16 MB, up to 1000 traces
External storage	1 x microSD card and 2 x USB 2.0
Connectivity	2 x USB 2.0, 1 x mini-USB, 1x LAN
Display	Bright 6.5" color anti-glare LCD
Environment	Meets MIL-PRF-28800F Class 2 specification
Temperature	Operating: -10 °C to +55 °C, non-operating: -51 °C to 71 °C
Battery	Lithium Ion, 3.5 hours operating time, field replaceable
Dimension	11.5" x 7.4" x 2.8" (292 mm x 188 mm x 72 mm)
Weight	Lightweight 6.2 lbs/2.8 kg including battery
GPS	Enables operators to find exact locations and time/location stamp their
	reports.

Options

The FieldFox base unit consists of a 4 GHz network analyzer. The following accessories are included: AC/DC adapter, 1 battery, soft carrying case, LAN cable, and Quick Reference Guide.

Model	Description
Option 030	Remote control capability
Option 010	Time domain
Option 104	4 GHz network analyzer (transmission/reflection)
Option 106	6 GHz network analyzer (transmission/reflection)
Option 112	QuickCal
Option 122	Full 2-port S-parameters
Option 302	External USB power sensor support
Option 305	Cable and antenna analyzer
Option 308	Vector voltmeter

Accessories (more under N9910X)

Model	Description
N9910X-800	T-calibration kit, DC-6 GHz, Type N (m)
N9910X-801	T-calibration kit, DC-6 GHz, Type N (f)
N9910X-802	T-calibration kit, DC-6 GHz, Type 7/16 DIN (m)
N9910X-803	T-calibration kit, DC-6 GHz, Type 7/16 DIN (f)
85514A	4-in-1 OSLT mechanical calibration kit, DC to 9 GHz, Type-N (m), 50 Ω
85515A	4-in-1 OSLT mechanical calibration kit, DC to 9 GHz, Type-N (f), 50 Ω
N9910X-814	Rugged phase-stable cable, Type-N (m) to 7/16 (m), 60 inch or 1.5 m
N9910X-815	Rugged phase-stable cable, Type-N (m) to 7/16 (m), 12 ft or 3.6 m
N9910X-816	Rugged phase-stable cable, Type-N (m) to Type-N (f), 3.28 ft or 1 m
N9910X-817	Rugged phase-stable cable, Type-N (m) to Type-N (m), 3.28 ft or 1 m
N9910X-846	Coaxial adapter, 50 Ω Type-N (m) to 75 Ω Type-N (f) (quantity two required for
	75Ω measurements)
N9910X-870	Extra battery
N9910X-872	External battery charger
N9910X-873	AC/DC adapter
N9910X-874	External bias tee, 2.5 MHz to 6 GHz, 1 W, 0.5 A
N9910X-875	DC car charger and adapter
N9910X-881	Hard transit case

www.keysight.com/find/FieldFox

Three-Year Warranty



www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans



Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

