

Keysight FieldFox Microwave Analyzers, 32/44/50 GHz

Delivers Benchtop Accuracy and MIL-Spec Durability to Field Applications

FieldFox brings bench-level accuracy into the field by delivering precise field microwave measurements that agree with benchtop analyzers. The FieldFox microwave analyzer (N9950/51/52A) base function is a cable and antenna analyzer and can be configured to include a spectrum and full 2-port network analyzer. To save space in a field kit, built-in capabilities can be added to provide up to 10 instruments in 1.



Key features

- Cable and antenna analyzer (return loss/distance-to-fault)
- Spectrum analyzer
- Full 2-port vector network analyzer
- Built-in power meter
- Independent signal generator
- Vector voltmeter
- Interference analyzer
- Pulse measurements
- Built-in variable DC voltage source
- Frequency counter measurements
- TDR cable measurements
- Built-in GPS receiver
- ECal support
- Extended range transmission analysis

Product highlights

- Rugged and weather resistant:
 - Meets MIL-PRF-28800F Class 2, no vents or fans, wide operating temp of -10 to +55 °C (14 to 131 °F)
 - Meets IEC/EN 60529 IP53 requirements
 - Type tested and meets Procedure 1 requirements for operation in explosive environments. MIL-810G, Method 511.5
- Portable: compact, light-weight 3.2 kg/7.1 lb package
- Combination analyzers:
 - Spectrum analyzer provides best amplitude accuracy of 0.5 dB, with no warm up required
 - VNA CalReady allows quick and accurate microwave device measurements in the field
 - Built-in microwave independent signal source with flattened power output makes system verification easier in the field
 - Full-band tracking generator
- Standard 3-year warranty

Function	Description
Cable antenna analyzer and vector network analyzer	
Frequency	300 kHz to 32 GHz, 44 GHz, 50 GHz
Dynamic range	Up to 110 dB
Output power	4 dBm to -53 dBm
Trace noise	0.008 dB
Spectrum analyzer	
Frequency	9 kHz (usable to 5 kHz) to 32 GHz, 44 GHz, 50 GHz
Displayed Average Noise Level (DANL)	-147 dBm @ 32 GHz; -144 dBm @ 40 GHz; -135 dBm @ 50 GHz
Third-Order Intercept (TOI)	15 dBm @ 2.4 GHz
Phase noise	-111 dBc at 10 kHz offset
Independent source	
Frequency	300 kHz to 32 GHz, 44 GHz, 50 GHz
General	
Environmental	Meets MIL-PRF-28800F Class 2, type tested for IP53
Temperature	Operating: -10 to +55 °C (14 to 131 °F)
Dimensions and weight	11.5" x 7.4" x 2.8" (292 x 188 x 72 mm), 3.2 kg/7.1 lb with battery

FieldFox Microwave Analyzer Options

The FieldFox base unit consists of a cable and antenna analyzer, the following accessories are included: AC/DC adapter, 1 battery, soft carrying case, LAN cable, quick reference guide and user guide.

Model number	Frequency	Description
N9950A	32 GHz	FieldFox microwave analyzer
N9951A	44 GHz	FieldFox microwave analyzer
N9952A	50 GHz	FieldFox microwave analyzer

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



www.keysight.com/find/AssurancePlans

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.

Model number	Description
Option 010	Vector network analyzer time domain
Option 030	Remote control capability
Option 208	USB power sensor measurements versus frequency
Option 209	Extended range transmission analysis (ERTA)
Option 210	Vector network analyzer: Transmission and reflection
Option 211	Vector network analyzer: Full 2-port S-parameters
Option 212	1 port mixed-mode S-parameters
Option 215	TDR cable measurements
Option 233	Spectrum analyzer
Option 235	Preamplifier
Option 236	Interference analyzer and spectrogram
Option 238	Spectrum analyzer time gating
Option 302	External USB power sensor support
Option 307	GPS receiver
Option 308	Vector voltmeter
Option 309	DC bias variable-voltage source
Option 310	Built-in power meter
Option 330	Pulse measurements

N9910X	FieldFox accessories: Adapters, antennas, cables, etc.
N9911X	Economical waveguide calibration components

www.keysight.com/find/FieldFox