

Product Fact Sheet

Keysight FieldFox Microwave Spectrum 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 handheld microwave measurements that agree with benchtop analyzers. FieldFox spectrum analyzers provide unprecedented total amplitude accuracy (± 0.5 dB), with no warm up required, and is the only handheld with a full-band tracking generator. Get next level of performance in real-time analysis without the need for a dedicated real time spectrum analyzer.



Key features

- Full-band tracking generator
- Independent signal source
- Interference analyzer
- Real-time spectrum analyzer (RTSA)
- Built-in power meter
- Built-in GPS receiver
- Built-in variable DC voltage source
- Pulse measurements

Product highlights

- Rugged:
 - Meets MIL-PRF-28800F Class 2
 - Meets IEC/EN 60529 IP53 requirements
 - Type tested and meets Procedure 1 requirements for operation in explosive environments. MIL-810G, Method 511.5
- Weather-resistant:
 - No vents or fans extends instrument reliability and withstands salty, humid environments with wide operating temp of -10 to $+55$ °C (14 to 131 °F)
- Portable:
 - Compact, light-weight 3.2 kg/7.1 lb package
- Spectrum analyzers:
 - Spectrum analyzer InstAlign technology provides unprecedented total amplitude accuracy for field tests
 - Built-in microwave independent signal source with flattened power output makes system verification easier in the field
 - Full-band tracking generator
 - Real-time spectrum analyzer (RTSA) with 10 MHz bandwidth and minimum detectable signal as short as 22 ns

Function	Description
Spectrum analyzer	
Frequency	9 kHz (usable from 5 kHz) to 32 GHz, 44 GHz, 50 GHz
Phase noise	-111 dBc @ 10 kHz
Third-Order Intercept (TOI)	15 dBm @ 2.4 GHz
Displayed Average Noise Level (DANL)	-147 dBm @ 32 GHz; -144 dBm @ 40 GHz; -135 dBm @ 50 GHz
Independent source/tracking generator	
Frequency	300 kHz to 32 GHz, 44 GHz, 50 GHz
Real-time spectrum analyzer (RTSA)	
Frequency	5 kHz to 32 GHz, 44 GHz, 50 GHz
Maxximum real-time bandwidth	10 MHz
Minimum signal duration with 100%	12.2 μ s
POI at full amplitude accuracy	
General	
Environmental	Meets MIL-PRF-28800F Class 2
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 Spectrum Analyzer Options

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

Model number	Frequency	Description
N9960A	32 GHz	FieldFox microwave spectrum analyzer
N9961A	44 GHz	FieldFox microwave spectrum analyzer
N9962A	50 GHz	FieldFox microwave spectrum analyzer

Model number	Description
Option 030	Remote control capability
Option 208	USB power sensor measurements versus frequency
Option 209	Extended range transmission analysis (ERTA)
Option 220	Full-band tracking generator
Option 235	Preamplifier
Option 236	Interference analyzer and spectrogram
Option 238	Spectrum analyzer time gating
Option 302	External USB power sensor support (U2000 sensor sold separately)
Option 307	Built-in GPS receiver (antenna sold separately)
Option 309	DC bias variable-voltage source
Option 310	Built-in power meter
Option 312	Channel scanner
Option 320	Reflection measurement (scalar measurement)
Option 330	Pulse measurements (with external peak power sensor)
Option 350	Real-time spectrum analyzer (RTSA)
Option 355	Analog demodulation

N9910X FieldFox accessories: Adapters, antennas, cables, etc.

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