

Keysight 14 FieldFox Analyzers, 4/6.5/9/14/18/26.5 GHz

Delivers Benchtop Accuracy and MIL-Spec Durability to Field Applications

Keysight Technologies, Inc. FieldFox brings bench-level accuracy into the field by delivering precise handheld RF and microwave measurements that agree with benchtop analyzers. FieldFox RF and microwave analyzers include: spectrum analyzers (N993x), full 2-port vector network analyzers (N992x), and all-in-one combination analyzers (N991x). The combination analyzer's base function is a cable and antenna analyzer and can be configured to include spectrum and network analysis.



Key differentiators

- Rugged and weather resistant:
 - 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
- 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 3.0 kg (6.6 lbs) package
- FieldFox analyzers:
 - Spectrum analyzer provides best amplitude accuracy ± 0.5 dB, no warm up required
 - Real-time spectrum analyzer (RTSA) with 10 MHz bandwidth and minimum detectable signal as short as 22 ns
 - VNAs offer the most accurate calibration technique (full 2-port unknown thru)
 - VNAs can test cable and antenna systems without external cal kits (QuickCal and CalReady)
 - Built-in microwave independent signal source with flattened power output makes system verification easier in the field
 - Full-band tracking generator

	N991xA	N992xA	N993xA
Cable/antenna analyzer	•	•	
Spectrum analyzer	•		•
Real-time spectrum analyzer	•		•
Vector network analyzer	•	•	
Tracking generator	•		•
Independent CW source	•		•

Function	Description
Cable antenna analyzer and vector network analyzer	
Frequency	30 kHz to 9 GHz, 14 GHz, 18 GHz, 26.5 GHz
Dynamic range	Up to 100 dB
Output power	Up to +2 dBm
Spectrum analyzer	
Frequency	5 kHz to 9 GHz, 14 GHz, 18 GHz, 26.5 GHz
Spur-free dynamic range	≥ 105 dB
Phase noise	-111 dBc at 10 kHz offset
Independent source	
Frequency	30 kHz to 9 GHz, 14 GHz, 18 GHz, 26.5 GHz
Real-time spectrum analyzer (RTSA)	
Frequency	5 kHz to 4GHz, 6.5 GHz, 9 GHz, 18 GHz, 26.5 GHz
Maximum real-time bandwidth	10 MHz
Minimum signal duration with 100% POI at full amplitude accuracy	12.2 μs
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 kg (6.6 lbs) with battery

FieldFox Analyzer Options

The FieldFox base unit consists of a cable and antenna analyzer, or spectrum analyzer, or VNA. 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
N991xA		
N9913A	4 GHz	FieldFox RF combination analyzer
N9914A	6.5 GHz	FieldFox RF combination analyzer
N9915A	9 GHz	FieldFox microwave combination analyzer
N9916A	14 GHz	FieldFox microwave combination analyzer
N9917A	18 GHz	FieldFox microwave combination analyzer
N9918A	26.5 GHz	FieldFox microwave combination analyzer
N992xA		
N9925A	9 GHz	FieldFox microwave vector network analyzer
N9926A	14 GHz	FieldFox microwave vector network analyzer
N9927A	18 GHz	FieldFox microwave vector network analyzer
N9928A	26.5 GHz	FieldFox microwave vector network analyzer
N993xA		
N9935A	9 GHz	FieldFox microwave spectrum analyzer
N9936A	14 GHz	FieldFox microwave spectrum analyzer
N9937A	18 GHz	FieldFox microwave spectrum analyzer
N9938A	26.5 GHz	FieldFox microwave spectrum analyzer

www.keysight.com/find/FieldFox

www.keysight.com/find/fieldfox-free-trials

Option	Feature	N991xA	N992xA	N993xA
CAT/vector network analysis				
		Combo	VNA	SA
010	VNA time domain	•	•	—
112	QuickCal	•	•	—
210	VNA transmission/reflection	•	•	—
211	VNA full 2-port S-parameters	•	•	—
212	1-port mixed mode S-parameters	•	•	—
215	TDR cable measurements	•	•	—
305	Cable and antenna analyzer	Std	•	—
308	Vector voltmeter	•	•	—
320	Reflection measurements (RL,VSWR)	Std	Std	•
Spectrum analysis				
209	Extended range transmission analysis (ERTA)	•	—	•
220	Full-band tracking generator	Opt 210 (+233)	—	•
233	Spectrum analyzer	•	—	Std
235	Preamplifier	•	—	•
236	Interference analyzer	•	—	•
238	Spectrum analyzer time gating	•	—	•
312	Channel scanner	•	—	•
350 ¹	Real-time spectrum analyzer (RTSA)	•	—	•
355	Analog demodulation	•	—	•
Power measurements				
208	USB power sensor vs frequency	•	•	•
302	External USB power sensor support (sensor sold separately)	•	•	•
310	Built-in power meter	•	•	•
330	Pulse measurements with power sensor	•	•	•
System features				
030	Remote control capability	•	•	•
307	Built-in GPS receiver (antenna sold separately)	•	•	•
309	DC bias variable voltage source	•	•	•
N9910X	FieldFox accessories: Adapters, antennas, cables, etc.			
N9911X	Economical waveguide calibration components			

1. RTSA capability is only available for N991x/3x with serial number prefix starting with MY5607/SG5607/US5607 or upgraded with Option N9910HU-100/300/400.

KEYSIGHT SERVICES

Accelerate Technology Adoption. Lower costs.

www.keysight.com/find/services

Keysight Services helps you improve productivity and product quality with our comprehensive service offerings of one-stop calibration, repair, asset management, technology refresh, consulting, training, and more.



Unlocking Measurement Insights

This information is subject to change without notice.
 © Keysight Technologies, 2017
 Published in USA, December 1, 2017
 5991-0756EN
www.keysight.com