## 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			
Maxixmum real-time bandwidth	10 MHz			
Minimum signal duration with 100% POI at full	12.2 μs			
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 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

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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         •         •         —           215         TDR cable measurements         •         •         —           305         Cable and antenna analyzer         Std         •         —           308         Vector voltmeter         •         •         —           308         Vector voltmeter         •         •         —           309         Reflection measurements (RL,VSWR)         Std         \$td         •           290         Extended range transmission analysis (ERTA)         •         •         •           299         Extended range transmission analysis (ERTA)         •         •         •           233         Spectrum analyzer         •	Option	Feature	N991xA	N992xA	N993xA		
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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         .           320         Reflection measurements (RL,VSWR)         Std         Std         .         .           Spectrum analysis           209         Extended range transmission analysis (ERTA)         .         .         .         .           220         Full-band tracking generator         Opt 210 (+233)         .		*	•	•	_		
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	309	DC bias variable voltage source	•	•	•		
N9911X Economical waveguide calibration components	N9910X	FieldFox accessories: Adapters, antennas, cables, etc.					
	N9911X	Economical waveguide calibration components					

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.

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