Keysight Technologies
N9320B RF Spectrum Analyzer

Configuration Guide

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Configure Your Keysight N9320A RF Spectrum Analyzer

The Keysight Technologies, Inc. N9320B is a general purpose spectrum analyzer from 9 kHz to 3 GHz. Its standard features include:

– Frequency power measurements
– One-button power suite, auto tune, and frequency counter
– AM/FM tune and listen
– 12 markers, 4 traces, and 2 customer-definable limit lines
– U2000 Series USB power sensor support
– USB and LAN connectivity

This step-by-step process will help you to configure your N9320B RF spectrum analyzer by tailoring its options to meet your requirements.

For detailed specifications, refer to the N9320B spectrum analyzer data sheet (5990-8119EN). For a product overview, refer to the N9320B spectrum analyzer brochure (5990-8118EN).

Ordering information

Description	Model number	Additional information
RF spectrum analyzer, 9 kHz to 3.0 GHz	N9320B	Accessories supplied as standard with each analyzer: Quick Start Guide, USB cable, N-BNC adapter, BNC cable, power cord, and documentation CD-ROM
Description	Option number	Additional information
Step 1. Add a preamplifier		
Preamplifier, 3.0 GHz	N9320B-PA3	Preamplifier improves the noise floor for low-level signal detection
Step 2. Add modulation analysis capability		
AM and FM demodulation metrics	N9320B-AMA	Provides modulation metrics of an AM or FM signal: Carrier power, modulation rate, AM depth, frequency deviation, SINAD[1], and carrier frequency offset
ASK and FSK demodulation metrics	N9320B-DMA	Provides modulation metrics of an ASK or FSK signal: Carrier power, ASK error, depth, and index, FSK deviation, FSK error, magnitude error, and carrier frequency offset

1. Signal-to-noise and distortion ratio

Step 3. Add scalar stimulus-response measurement capability		
Tracking generator, 100 kHz to 3.0 GHz	N9320B-TG3	A cost-effective method to measure transmission characters of RF devices. An external bridge or a directional coupler needs to be added to implement reflection measurements
Step 4. Add optional features		
Resolution bandwidth (–6 dB): 200 Hz, 9 kHz, 120 kHz, and 1 MHz	N9320B-EMF	Provides optional CISPR16-1-1 EMI filters for preliminary EMI pre-compliance measurements
GPIB interface	N9320B-G01	IEEE-488 bus connector, used in test automation systems
Customized save-last utility	N9320B-C20	N9320B automatically saves its settings and status once any changes are made. After the power cycle, the N9320B recovers the prior setups before powering off
Instrument power-on utility at AC power cycle	N9320B-C30	N9320B powers on directly at AC power cycle without the user pushing the power-on button on the unit's front panel. A solution designed for test automation systems

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Description	Option number	Additional information
Step 5. Add optional accessories		
RF training kit	Y1800A	Consists of RF transceiver and a full set of pre-written lab sheets. Prepared for RF teaching labs or training agencies
Hard transit case (D x W x H)	N9320B-1TC	– 645 x 444 x 268 mm, 13 kg nominal – 25.4 x 17.5 x 10.6 in, 29 lb nominal
Rack mount kit	N9320B-1CM	Includes a rackmount flange and front handle kit. Fits standard 19-inch rack and occupies three units of rack space
Handle and bumper	N9320B-1HB	Available for ordering only at time of initial instrument purchase

Need more RF and microwave accessories? Visit **www.keysight.com/find/accessories**

Description	Option number	Additional information
Step 6. Choose localized User's Guide		
English User's Guide	N9320B-ABA	
Simplified Chinese User's Guide	N9320B-AB2	
Japanese User's Guide	N9320B-ABJ	
Step 7. Choose warranty length		
Select coverage		
3-year warranty (return to Keysight), standard	Included	3-year warranty (return to Keysight), standard
5-year warranty assurance plan (return to Keysight)	R-51B-001-5Z	Priority warranty service includes one-time coverage for an EOS/ESD failure
Step 8. Add calibration, technical training, support, and upgrade		
Commercial calibration certificate with test data	N9320B-UK6	Calibration certificate only available at time of instrument purchase; only provides measurement results
Select Keysight Calibration Plan		
3-year calibration assurance plan (return to Keysight)	R-50C-011-3	Priority calibration service covering all calibration costs for 3 years; 15% cheaper than buying stand-alone calibrations
5-year calibration assurance plan (return to Keysight)	R-50C-011-5	Priority calibration service covering all calibration costs for 5 years; 20% cheaper than buying stand-alone calibrations

Other calibration options may available, for more information on calibration, go to: www.keysight.com/find/calibration.
For more information on training and application support services, go to: www.keysight.com/find/training.

Instrument Upgrades

Most of the Keysight N9320B RF spectrum analyzer options are available for post-sales retrofit.

For license-key upgrades that do not require additional hardware:

1. Place an order for the upgrade with Keysight and request to receive the software entitlement certificate through email
2. Install the license key in the N9320B. Upgrade firmware to the latest revision if required
3. Restart the N9320B
4. Begin using the new capability

Description	Upgrade number	Additional information
Add preamplifier, 3.0 GHz	N9320BK-PA3	
Add AM/FM demodulation metrics	N9320BK-AMA	
Add ASK/FSK demodulation metrics	N9320BK-DMA	
Add tracking generator, 100 kHz to 3.0 GHz	N9320BK-TG3	The tracking generator is additional hardware that is installed inside the N9320B. Upgrade is performed at Keysight's local service center
Add GPIB interface	N9320BK-G01	Requires additional hardware be installed inside the N9320B
Add EMC filter (-6 dB down)	N9320BK-EMF	
Add hard transit case	N9320BK-1TC	
Add rack mount kit	N9320BK-1CM	
Add customized save-last utility	N9320BK-C20	
Add instrument power-on utility at AC power cycle	N9320BK-C30	Upgrade performed at Keysight's local service center
Revision to current	N9320BK-R2C	Enables the latest feature set for the instrument

A comprehensive summary about the N9320B upgrades is also available at: www.keysight.com/find/n9320b_upgrade.

Related Literature

Publication number	Publication title
5990-8116EN	*Keysight N9310A RF Signal Generator*, Data Sheet

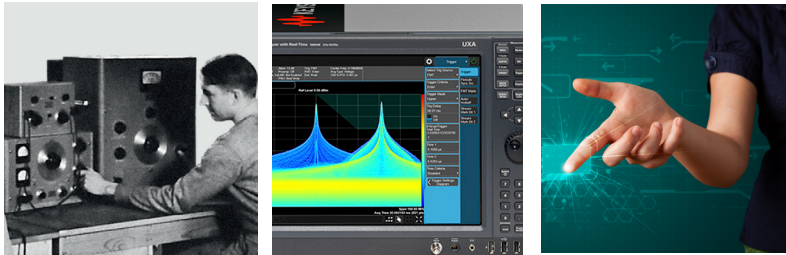# Other Information

Keysight product registration

Register your instruments for service notifications, firmware update alerts, application notes and more. You have the Keysight edge. Register today and keep it sharp: www.keysight.com/find/register.

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Our deep offering in design, test, and measurement services deploys an industry-leading array of people, processes, and tools. The result? We help you implement new technologies and engineer improved processes that lower costs.

Three-Year Warranty
www.keysight.com/find/ThreeYearWarranty
Keysight's committed to superior product quality and lower total cost of ownership. Keysight is the only test and measurement company with three-year warranty standard on all instruments, worldwide. And, we provide a one-year warranty on many accessories, calibration devices, systems and custom products.

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www.keysight.com/find/n9310b

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www.keysight.com/find/contactus

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