

N5166B CXG

RF Vector Signal Generator

9 kHz – 3 or 6 GHz



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Configure your N5166B CXG RF Vector Signal Generator

This step-by-step process will help you to configure the N5166B CXG signal generator. Choose options to meet your requirements.

N5166B CXG is an entry-level RF vector signal generator in the X-Series signal generators. For detailed specifications, refer to the [CXG signal generator data sheet \(5992-3959EN\)](#).

Step 1. Choose maximum frequency range

Description	Option number	Additional information
Frequency range, 9 kHz – 3 GHz	N5166B-503	Not compatible with 506
Frequency range, 9 kHz – 6 GHz	N5166B-506	Not compatible with 503

Step 2. Choose baseband options

Description	Option number	Additional information
ARB baseband generator (60 MHz RF bandwidth, 32 MSa)	N5166B-653	
Upgrade baseband generator from 60 to 120 MHz RF bandwidth	N5166B-655	Requires 653
Upgrade baseband generator memory from 32 to 512 MSa	N5166B-022	Requires 653

Step 3. Choose waveform playback licenses

Signal Studio software is free to download and use on your PC for creating desired waveform files. The following options (221-229, 250-259) licenses are to be installed in the N5166B CXG to enable the offline waveform playback utility and generate desired vector signals.

Description	Option number	Additional information
Waveform license 5-pack 1	N5166B-221	Use option 221 to 229 to purchase up to 9-pack for 45 Signal Studio waveforms offline playback utility. Requires option 653
Waveform license 5-pack 2	N5166B-222	
Waveform license 5-pack 3	N5166B-223	
Waveform license 5-pack 4	N5166B-224	
Waveform license 5-pack 5	N5166B-225	
Waveform license 5-pack 6	N5166B-226	
Waveform license 5-pack 7	N5166B-227	
Waveform license 5-pack 8	N5166B-228	
Waveform license 5-pack 9	N5166B-229	

Step 3. Choose waveform playback licenses (continued)

Description	Option number	Additional information
Waveform license 50-pack 1	N5166B-250	Use option 250 to 259 to purchase up to 10-pack for 500 Signal Studio waveforms offline playback utility. Requires option 653
Waveform license 50-pack 2	N5166B-251	
Waveform license 50-pack 3	N5166B-252	
Waveform license 50-pack 4	N5166B-253	
Waveform license 50-pack 5	N5166B-254	
Waveform license 50-pack 6	N5166B-255	
Waveform license 50-pack 7	N5166B-256	
Waveform license 50-pack 8	N5166B-257	
Waveform license 50-pack 9	N5166B-258	
Waveform license 50-pack 10	N5166B-259	

Step 4. Choose instrument features

Description	Option number	Additional information
AM, FM, phase modulation	N5166B-UNT	
Narrow pulse modulation	N5166B-UNW	
Multifunction generator	N5166B-303	
Internal solid-state drive	N5166B-009	
Flexible reference input	N5166B-1ER	

Step 5. Choose accessories

Description	Option number	Additional information
Rack mount flange kit	1CM110A	
Rack mount flange kit with front handles	1CP104A	
Rack slide kit	1CR112A	
Front handle kit	1CN106A	
Front panel cover	N5180CVRB	
Hard transit case	N5180AXTB	

Step 6. Others: Calibration option, Service options

Description	Option number	Additional information
Commercial calibration certificate with test data	N5166B-UK6	
Remote scheduled assistance 1 to 999 hours	PS-S10	
Daily productivity assistance	PS-S20	

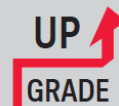
Upgrade Your Existing N5166B CXG

Fast license-key upgrades for options 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. Redeem the certificate through the Web by following the instructions on the certificate
3. Install the license file using Keysight License Manager
4. Begin using the new capability

You Can Upgrade!

Options can be added after your initial purchase. All of our X-Series application options are license-key upgradeable.



Installation, calibration and verification information is available at: www.keysight.com/find/cxg_upgrades

Description	Upgrade number	Requirement	Additional information
ARB baseband generator (60 MHz RF bandwidth, 32 MSa)	N5166BU-653	None	Customer installable – software, license key
Upgrade baseband generator from 60 to 120 MHz RF BW	N5166BU-655	653	Customer installable – software, license key
Upgrade baseband generator memory from 32 to 512 MSa	N5166BU-022	653	Customer installable – software, license key
Waveform license 5-pack 1	N5166BU-221	653	Customer installable – software, license key
Waveform license 5-pack 2	N5166BU-222	653	Customer installable – software, license key
Waveform license 5-pack 3	N5166BU-223	653	Customer installable – software, license key
Waveform license 5-pack 4	N5166BU-224	653	Customer installable – software, license key
Waveform license 5-pack 5	N5166BU-225	653	Customer installable – software, license key
Waveform license 5-pack 6	N5166BU-226	653	Customer installable – software, license key
Waveform license 5-pack 7	N5166BU-227	653	Customer installable – software, license key
Waveform license 5-pack 8	N5166BU-228	653	Customer installable – software, license key
Waveform license 5-pack 9	N5166BU-229	653	Customer installable – software, license key
Waveform license 50-pack 1	N5166BU-250	653	Customer installable – software, license key
Waveform license 50-pack 2	N5166BU-251	653	Customer installable – software, license key
Waveform license 50-pack 3	N5166BU-252	653	Customer installable – software, license key
Waveform license 50-pack 4	N5166BU-253	653	Customer installable – software, license key
Waveform license 50-pack 5	N5166BU-254	653	Customer installable – software, license key
Waveform license 50-pack 6	N5166BU-255	653	Customer installable – software, license key
Waveform license 50-pack 7	N5166BU-256	653	Customer installable – software, license key
Waveform license 50-pack 8	N5166BU-257	653	Customer installable – software, license key
Waveform license 50-pack 9	N5166BU-258	653	Customer installable – software, license key
Waveform license 50-pack 10	N5166BU-259	653	Customer installable – software, license key
AM, FM, phase modulation	N5166BU-UNT	None	Customer installable – software, license key
Narrow pulse modulation	N5166BU-UNW	None	Customer installable – software, license key
Multifunction generator	N5166BU-303	None	Customer installable – software, license key
Internal solid-state drive	N5166BU-009	None	Customer installable – software, license key
Flexible reference input	N5166BU-1ER	None	Customer installable – software, license key

Add Software

Keysight offers flexible license types and terms to support your project's requirements. Whether your software will be a staple for years, or you have a short-term need for a particular application, Keysight licensing puts you in charge.

The following software are supported by N5166B CXG RF vector signal generator. Currently, these software products offer node-locked license type (License can be used on one specified instrument or computer), with a selection of time-based license terms or the perpetual license term.

Description	Option number	Requirement
Custom digital modulation	N5180431B	Option 653
Calibrated AWGN	N5180403B	Option 653
Multitone and two-tone	N5180430B	Option 653
Pulse train generator	N5180320B	Option UNW

You may also consult your nearest Keysight sales representative for more details about software license types, or refer to [Software Terms, Types and KeysightCare \(5992-3419EN\)](#) for more information.

Reference

Publication title	Publication number
N5166B CXG signal generator data sheet	5992-3959EN
N9000B CXA signal analyzer data sheet	5992-1274EN
X-Series Signal Sources Technical Overview	5990-9957EN

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