

Keysight Technologies

EXG X-Series Signal Generator

N5173B Microwave Analog

Configuration Guide

This configuration guide will help you determine which performance options, software applications, accessories, and services to include with your new EXG or to add as upgrades to an existing EXG.



Configure Your N5173B EXG Microwave Analog Signal Generator

This step-by-step process will help you configure your EXG microwave signal generator. Tailor the performance to meet your requirements. For detailed specifications, refer to the EXG signal generator data sheet (5991-3132EN).

Step 1. Select maximum frequency range (required option; frequency range not upgradeable)			
Description	Option number	Additional information	Matching N5183A options
Frequency range from 9 kHz to 13 GHz	N5173B-513	Not compatible with 520, 532, 540 Includes standard adapter 3.5 mm female to 3.5 mm female	
Frequency range from 9 kHz to 20 GHz	N5173B-520	Not compatible with 513, 532, 540 Includes standard adapter 3.5 mm female to 3.5 mm female	N5183A-520
Frequency range from 9 kHz to 31.8 GHz	N5173B-532	Not compatible with 513, 520, 540 Includes standard adapter set, 2.4 mm female-female and 2.4 mm female to 2.9 mm female	N5183A-532
Frequency range from 9 kHz to 40 GHz	N5173B-540	Not compatible with 513, 520, 532 Includes standard adapter set, 2.4 mm female-female and 2.4 mm female to 2.9 mm female	N5183A-540

Step 2. Choose connector configuration			
Description	Option number	Additional information	Matching N5183A options
Move all connectors to rear panel	N5173B-1EM	Not upgradable	N5183A-1EM
Type-N (f) RF output connector	N5173B-1ED	Not upgradable Not compatible with 532 or 540 Includes standard adapter type-N male to 3.5 mm female	N5183A-1ED

Step 3. Choose performance enhancement options			
Description	Option number	Additional information	Matching N5183A options
AM, FM, phase modulation	N5173B-UNT		N5183A-UNT
Narrow pulse modulation	N5173B-UNW	Not compatible with UW2	N5183A-UNW
Narrow pulse modulation up to 31.8 GHz	N5173B-UW2	Not compatible with UNW: requires 540	N5183A-HNS
Multifunction generator	N5173B-303	Not upgradable	
Pulse train generator	N5173B-320	Requires UNW	N5183A-320
Instrument security and removable memory card	N5173B-006		N5183A-006
Fast frequency switching	N5173B-UNZ	Not compatible with UZ2	N5183A-UNZ
Fast frequency switching > 1.15 ms and \pm 0.05% of final frequency	N5173B-UZ2	Not compatible with UNZ	N5183A-HNZ
High output power	N5173B-1EA		N5183A-1EA
Step attenuator	N5173B-1E1		N5183A-1E1
Flexible reference input (1 to 50 MHz)	N5173B-1ER		N5183A-1ER

Step 4. Choose VDI mmW frequency extension module (optional)

Description	Option number	Matching N5183A options
Frequency range from 50 to 75 GHz	E8257D-V15	
Frequency range from 60 to 90 GHz	E8257D-V12	
Frequency range from 75 to 110 GHz	E8257D-V10	
Frequency range from 90 to 140 GHz	E8257D-V08	
Frequency range from 110 to 170 GHz	E8257D-V06	
Frequency range from 140 to 220 GHz	E8257D-V05	
Frequency range from 220 to 330 GHz	E8257D-V03	
Frequency range from 260 to 400 GHz	E8257D-V2B	
Frequency range from 325 to 500 GHz	E8257D-V02	
Frequency range from 500 to 750 GHz	E8257D-V1B	
Frequency range from 750 to 1100 GHz	E8257D-V01	

Step 5. Choose accessory and documentation options

Description	Option number	Matching N5183A options
Rack slide kit	1CR012A	N5183A-1CR
Front handle kit	1CN006A	N5183A-1CN
Rack mount flange kit	1CM010A	N5183A-1CM
Rack mount flange kit with front handles	1CP004A	N5183A-1CP
Hard transit case	N5173B-AXT	N5183A-AXT
CD-ROM containing English documentation set	N5173B-CD1	N5183A-CD1
Service documentation, assembly and component	N5173B-OBW	N5183A-OBW

Step 6. Choose warranty and calibration options

Description	Option number	Matching N5183A options
3-year warranty (return-to-Keysight), standard	Included	Included
Return-to-Keysight warranty, 5 years	R-51B-001-5C	R-51B-001-5C
Onsite warranty – 1 year	R-51C-001-1CU	
Onsite warranty – 3 year	R-51C-001-3CU	
Commercial calibration certificate with test data	N5173B-UK6	N5183A-UK6
Keysight Calibration + Uncertainties + Guardbanding (accredited cal)	N5173B-AMG	N5183A-1A7
ANSI Z540-1-1994 Calibration	N5173B-A6J	R-50C-021-3
Calibration Assurance Plan, Return-to-Keysight, 5 years	R-50C-011-5	R-50C-011-5

Step 7. Choose startup assistance service options

Description	Option number	Matching N5183A options
Remote scheduled assistance 1 to 999 hours	PS-S10	PS-S10
Daily productivity assistance	PS-S20	PS-S20
Signal generator and source basics; half-day, maximum of eight students on site	PS-T10-ASG	PS-T10-ASG
Custom services to be qualified by Keysight	PS-X10	PS-X10

Upgrade Your Existing EXG Analog Signal Generator

Fast license-key upgrades for options that do not require additional hardware:

1. Place an order for the upgrade with Keysight Technologies, Inc. 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

Installation, calibration, and verification information is available at:

www.keysight.com/find/exg_upgrades

You can upgrade!

Options can be added after your initial purchase.



All of our X-Series application options are license-key upgradeable.

Description	Upgrade number	Requirements	Additional information
Service documentation, assembly and component	N5173BU-0BW	None	Printed copy of service guide
Instrument security and removable memory card	N5173BU-006	None	Hardware and license key upgrade
High output power	N5173BU-1EA	None	Customer installable – software, license key
Flexible reference input (1 to 50 MHz)	N5173BU-1ER	None	Customer installable – software, license key
Step attenuator	N5173BU-1E1	None	Customer installable – software, license key
Multifunction generator	N5173BU-303	None	Customer installable – software, license key
Pulse train generator	N5173BU-320	Requires UNW	Customer installable – software, license key
Hard transit case	N5173BU-AXT	None	
CD-ROM containing English documentation set	N5173BU-CD1	None	
Commercial calibration certificate with test data	N5173BU-UK6	None	
AM, FM, phase modulation	N5173BU-UNT	None	Customer installable – software, license key
Narrow pulse modulation	N5173BU-UNW	None	Customer installable – software, license key
Fast switching	N5173BU-UNZ	Not compatible with UZ2	Customer installable – software, license key
Narrow pulse modulation up to 31.8 GHz	N5173BU-UW2	Not compatible with UNW: requires 540	Customer installable – software, license key
Fast frequency switching > 1.15 ms and $\pm 0.05\%$ of final frequency	N5173BU-UZ2	Not compatible with UNZ	Customer installable – software, licence key
Rack slide kit	1CR012A	None	Hardware
Front handle kit	1CN006A	None	Hardware
Rack mount flange kit	1CM010A	None	Hardware
Rack mount flange kit with front handles	1CP004A	None	Hardware

Related Literature

Keysight X-Series signal generators

<i>EXG Microwave Analog Signal Generator Data Sheet</i>	5991-3132EN
<i>MXG Microwave Analog Signal Generator Data Sheet</i>	5991-3131EN
<i>Microwave Signal Generator Flyer</i>	5991-3594EN
<i>X-Series Signal Generator Brochure</i>	5990-9957EN

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Three-Year Warranty



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 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 full one-year warranty on all accessories, calibration devices, systems and custom products.

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