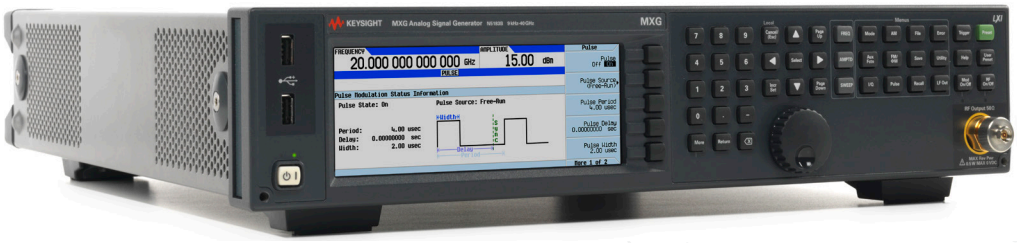
CONFIGURATION GUIDE

MXG X-Series Signal Generator N5183B Microwave Analog

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



KEYSIGHT TECHNOLOGIES

Configure Your N5183B MXG Microwave Analog Signal Generator

This step-by-step process will help you configure your MXG microwave signal generator. Tailor the performance to meet your requirements. For detailed specifications, refer to the MXG signal generator data sheet (5991-3131EN).

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	N5183B-513	Not compatible with 520, 532, 540	
Frequency range from 9 kHz to 20 GHz	N5183B-520	Not compatible with 513, 532, 540	N5183A-520
Frequency range from 9 kHz to 31.8 GHz	N5183B-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	N5183B-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	N5183B-1EM	Not upgradable	N5183A-1EM
Type-N (f) RF output connector	N5183B-1ED	Not upgradable Not compatible with 532 or 540 Includes standard adapter type-N male to 3.5 mm female	N5183A-1ED
Standard connector 3.5mm	N5183B-UNC	Not upgradable Not compatible with 532 or 540 Includes standard adapter 3.5 mm female to 3.5 mm female	

Step 3. Choose performance enhancement options

Description	Option number	Additional information	Matching N5183A options
AM, FM, phase modulation	N5183B-UNT		N5183A-UNT
Narrow pulse modulation	N5183B-UNW	Not compatible with UW2	N5183A-UNW
Narrow pulse modulation up to 31.8 GHz	N5183B-UW2	Not compatible with UNW. Requires 540	N5183A-HNS
Enhanced low phase noise	N5183B-UNY	Not upgradable	
Multifunction generator	N5183B-303		
Instrument security and removable memory card	N5183B-006		N5183A-006
Fast frequency switching	N5183B-UNZ	Not compatible with UZ2	N5183A-UNZ
Fast frequency switching > 1.15 ms and ± 0.05% of final frequency	N5183B-UZ2	Not compatible with UNZ	N5183A-HNZ
High output power	N5183B-1EA		N5183A-1EA
Step attenuator	N5183B-1E1		N5183A-1E1
Flexible reference input (1 to 50 MHz)	N5183B-1ER		N5183A-1ER

Step 4. Choose VDI mmW frequency extension module (Optional)	
Description	**Option number**
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 embedded software		
Note: The following software can be added at purchase or as an upgrade. For more information on licenses, go to **www.keysight.com/find/SS-licensing**		
Description	**Option number**	**Hardware requirements**
Pulse train generator	N5180320B	UNW

Step 6. Choose accessory and documentation options	
Description	**Option number**
Rack slide kit	1CR112A
Front handle kit	1CN106A
Rack mount flange kit	1CM110A
Rack mount flange kit with front handles	1CM104A
Front panel cover	N5183B-CVR
Hard transit case	N5183B-AXT
CD-ROM containing English documentation set	N5183B-CD1
Service documentation, assembly and component	N5183B-0BW

Step 7. Choose warranty and calibration options	
Description	**Option number**
Commercial calibration certificate with test data	N5183B-UK6
Keysight Calibration + Uncertainties + Guardbanding (accredited cal)	N5183B-AMG
ANSI Z540-1-1994 Calibration	N5183B-A6J
Calibration Assurance Plan, Return-to-Keysight, 5 years	R-50C-011-5
Calibration Assurance Plan, Return-to-Keysight, 7 years	R-50C-011-7
Calibration Assurance Plan, Return-to-Keysight, 10 years	R-50C-011-10

Step 8. 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 MXG 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/mxg_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	N5183BU-0BW	None	Printed copy of service guide
Instrument security and removable memory card	N5183BU-006	None	Hardware and license key upgrade
High output power	N5183BU-1EA	None	Customer installable – software, license key
Flexible reference input (1 to 50 MHz)	N5183BU-1ER	None	Customer installable – software, license key
Step attenuator	N5173BU-1E1	None	Customer installable - software, license key
Multifunction generator	N5183BU-303	None	Customer installable – software, license key
Pulse train generator	N5180320B	Requires UNW	Customer installable – software, license key
Hard transit case	N5183BU-AXT	None	
CD-ROM containing English documentation set	N5183BU-CD1	None	
Commercial calibration certificate with test data	N5183BU-UK6	None	
AM, FM, phase modulation	N5183BU-UNT	None	Customer installable – software, license key
Narrow pulse modulation	N5183BU-UNW	None	Customer installable – software, license key
Fast switching	N5183BU-UNZ	Not compatible with UZ2	Customer installable – software, license key
Narrow pulse modulation up to 31.8 GHz	N5183BU-UW2	Not compatible with UNW: Requires 540	Customer installable - software, license key
Fast frequency switching > 1.15 ms and ± 0.05% of final frequency	N5183BU-UZ2	Not compatible with UNZ	Customer installable - software, licence key
Rack slide kit	1CR112A	None	Hardware
Front handle kit	1CN106A	None	Hardware
Rack mount flange kit	1CM110A	None	Hardware
Rack mount flange kit with front handles	1CM104A	None	Hardware
Front panel cover	N5183B-CVR	None	Hardware

Related Literature

Keysight X-Series signal generators

Publication title	Publication number
EXG X-Series Signal Generator N5173B Microwave Analog - Data Sheet	5991-3132EN
MXG X-Series Signal Generator N5183B Microwave Analog - Data Sheet	5991-3131EN
PSG, MXG, and EXG Microwave Signal Generators - Flyer	5991-3594EN
X-Series Signal Generators N5181B/N5171B Analog N5182B/N5172B Vector – Technical Overview	5990-9957EN

Learn more at: www.keysight.com

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