

# Agilent E8267C PSG Vector Signal Generator

**Configuration Guide** 



E8267C PSG vector signal generator

This guide is intended to assist you with the ordering process of the PSG signal generators.

Standard product includes electronic manuals (CD-ROM), adapters and US power cord.

High output power (option IEA) and step attenuator (option IEI) are standard features on the E8267C vector signal generator.

## Agilent Microwave PSG vector signal generator options

Step 1. Choose type of signal generator with frequency range (Mandatory)

Selection	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-520	PSG vector signal generator 250 kHz to 20 GHz	Used for vector signal simulation and flexible waveform sequencing		

#### Lowest phase noise

#### Step 2. Choose enhanced phase noise - option UNR

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-UNR	Enhanced close-in phase noise performance	User's application requires low close-in phase noise (i.e. –106 dBm typical) at 1 kHz offset from 10 GHz) approximately 24 dB improvement over standard		

### Narrow pulse modulation

#### Step 3. Choose narrow pulse modulation - option 1E6

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-1E6	Provides narrow pulse modulation below 3.2 GHz. Narrow pulse modu- lation above 3.2 GHz is standard with the instrument.			

## Stimulus response capability with scalar network analyzer

Step 4. Choose ramp sweep - option 007

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-007	Provides ramp sweep, scalar interface, Z-axis blanking, and markers	User's application requires stimulus response and utilizes 8757D scalar network analyzer		

## Internal baseband generator

Step 5. Choose internal baseband generator with memory

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-002	Internal baseband generator with 32 Msample memory	Used to produce arbitrary and real-time I/Q waveforms		
	E8267C-005	6 GB internal hard drive	Used for non-volatile waveform storage		E8267C-002

### Wide RF modulation bandwidth

Step 6. Choose wideband external I/Q- option 015

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-015	Wideband external I/Q inputs	Provides up to 1 GHz uncalibrated RF modulation bandwidth; standard provides 160 MHz RF bandwidth modulation		

## **Real-world signal simulation**

Step 7. Choose Signal Studio software- PC and spectrum analyzer required

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-420	Signal Studio software for pulse building	Used to generate customized pulse patterns for simulation; Requires PSA or ESA spectrum analyzer		E8267C-002 (mandatory)* E8267C-1E6 E8267C-005 E8267C-UNR
	E8267C-408	Signal Studio software for enhanced multitone signals	Generates multiple tone signals and applies predistortion techniques to remove the non- linear distortion of the signal generator; Requires PSA spectrum analyzer		E8267C-002 (mandatory)* E8267C-UNR

<sup>\*</sup> provides 80 MHz of RF modulation bandwidth

## **Accessory options**

Choose accessories or instrument connector configuration (Not mandatory)

Note: Standard 20 GHz models have a 3.5 mm (m) RF output connector on the front panel.

Selection	Ordering	Description	Purpose	Not compatible	Recommended
✓	number				option(s)
	E8267C-1ED	Type-N (f) connector			
	E8267C-1EM	Moves all			
		connectors to			
		rear panel			
	E8267C-1CM	Rack mount kit			
	E8267C-1CN	Front handle kit			
	E8267C-1CP	Rack mount kit with front handle kit			
	83554A	Millimeter-wave	Banded solution		E8267C-1EA
		source module	for extending		
		R-band	frequency from		
			26.5 to 40 GHz		
	83555A	Millimeter-wave	Banded solution		E8267C-1EA
		source module	for extending		
		Q-band	frequency from		
			33 to 50 GHz		
	83556A	Millimeter-wave	Banded solution		E8267C-1EA
		source module	for extending		
		U-band	frequency from 40 to 60 GHz		
	005574	8.8911			500070 454
	83557A	Millimeter-wave	Banded solution		E8267C-1EA
		source module V-band	for extending frequency from		
		v-pariu	50 to 75 GHz		
	83558A	Millimeter-wave	Banded solution		E8267C-1EA
J	03330A	source module	for extending		E020/G-TEA
		W-band	frequency from		
		Juliu	75 to 110 GHz		
	8120-8806	Master/slave			
		interface cable			

## **Manuals**

### **Choose manuals (Not mandatory)**

Standard products ship with electronic (CD-ROM) manuals. The CD-ROM includes user's guide, installation guide, programming guide, calibration guide, service guide, SCPI command reference guide, error messages, key reference guide, and additional product literature.

Selection 🗸	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	E8267C-ABA	English manual set (users, programming and calibration) (hardcopy – no CD)			
	E8267C-ABD	German localized supplemental user's guide (hardcopy – no CD)			
	E8267C-ABF	French localized supplemental user's guide hardcopy – no CD)			
	E8267C-ABJ	Japanese localized supplemental user's guide hardcopy – no CD)			
	E8267C-ABA	Korean localized supplemental user's guide hardcopy – no CD)			
	E8267C-CD1	CD-ROM documentation (includes PDF files of user's guide, programming guide, calibration guide, service guide, SCPI command reference guide, error messages, key reference guide, and additional product literature)			
	E8267C-0BW	Adds the service guid (assembly level)			
	E8267C-UK6	Commercial calibration certificate with test d	•••		

# Choose documentation (Not mandatory) If you want to order PSG documentation separately

Selection	Documentation	Title	
✓	Part Number		
	E8251-90259	Service Guide	
	E8251-90251	User's Documentation on CD-ROM	
	E8251-90252	Installation Guide	
	E8251-90258	Calibration Guide	
	E8251-90253	User's Guide	
	E8251-90254	Key and Data Field Reference	
	E8251-90255	Programming Guide	
	E8251-90256	SCPI Command Reference	
	E8251-90257	Error Messages	

# Warranty, service and calibration options

#### Choose a warranty plan (Not mandatory)

For warranty and service of 5 years, please order 60 months of R-51B (quantity = 60). Standard warranty is 36 months.

Selection	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	R-51B	Return-to-Agilent warranty and service plan			

## Choose a calibration plan<sup>1</sup> (Not mandatory)

For 3 years, order 36 months of the appropriate calibration plan shown below. For 5 years specify 60 months.

Selection	Ordering number	Description	Purpose	Not compatible	Recommended option(s)
	R-50C-001	Standard calibration			
	R-50C-002	Standards compliant calibration			

## **Upgradeable options**

If an option is not mentioned that you would like to have upgraded on your PSG (E8267/E8257/E8247C only), please contact your local Agilent representative about our customized upgradeable options.

### Factory upgradeable options for the E8267C signal generators To add upgradeable options to a model, use the following ordering scheme:

	Example
Model # F	E8267CF
Model # - option number	E8267C-007
Model # - option number	E8267C-015

### Choose factory upgradeable options (Not mandatory)

Selection	Upgradeable options	Send instrument back to the factory for upgrade
	E8267CF-1E6	Yes
	E8267CF-1ED	Yes
	E8267CF-1EM	Yes
	E8267CF-UNR	Yes
	E8267CF-007	Yes
	E8267CF-015	Yes
	E8267CF-005	Yes

## Customer and service center installable upgrade kits for the E8267C signal generators To add upgradeable options to a model, use the following ordering scheme:

	Example
Model # K	E8267CK
Model # - option number	E8267C-007
Model # - ontion number	F8267C-015

#### Choose customer and service center installable upgrade kits (Not mandatory)

Service center can install upgrade kits for an additional cost.

Please consult your local Agilent representative for futher information.

Selection ✓	Upgradeable options	Upgrade kit will be sent to the customer for installation
	E8267CK-007	Yes
	E8267CK-015	Yes
	E8267CK-005	Yes

<sup>1.</sup> Options not available in all countries.

## **Related Agilent literature**

PSG Signal Generator Brochure Literature number 5988-7538EN

Agilent E8247/57C
PSG CW and Analog Signal Generator Data Sheet
Literature number 5988-7454EN

Agilent E8267C
PSG Vector Signal Generator Data Sheet
Literature number 5988-6632EN

Agilent E8247/57C
PSG CW and Analog Signal Generator Configuration Guide
Literature number 5988-7879EN

PSG Series Product Note: Millimeter Head Literature number 5988-2567EN

*PSG Two-tone and Multi-tone Application Note*Application Note 1410
Literature number 5988-7689EN

Agilent Signal Studio for Pulse Building Technical Overview Literature number 5988-8134EN

Digital Modulation in Communications Systems — An Introduction Application Note 1298 Literature number 5965-7160E

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Free Agilent software:

- Latest software and drivers for the PSG
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- PSG/ESG Download assistant software
  - Download waveforms directly from the MATLAB® environment into the signal generator for playback
- · Agilent IntuiLink connectivity software
  - Connectivity software solution that links test and measurement instrument data to PC applications

The above free software can be found by selecting the Software, Firmware, & Drivers embedded link located on each of the PSG E8267C, PSG E8257C or PSG E8247C (where applicable). For more information visit:

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