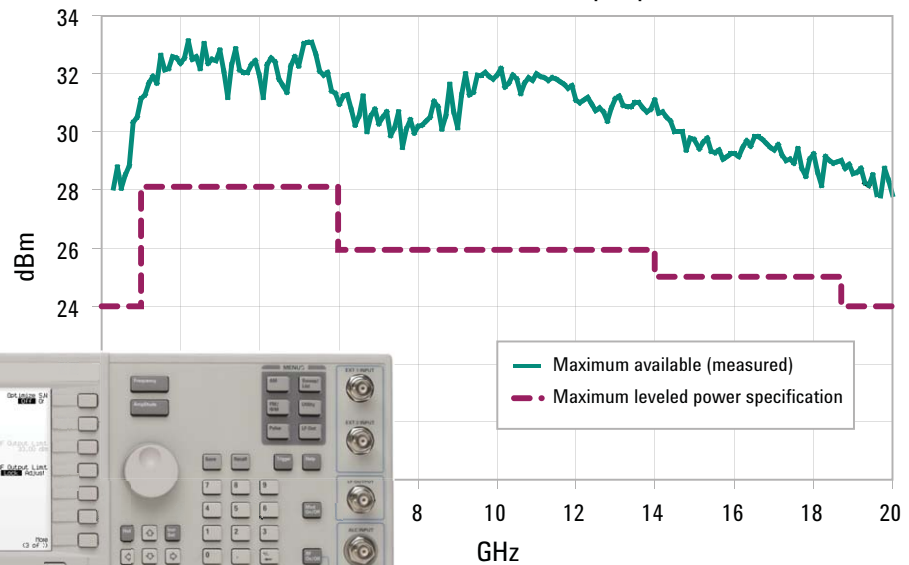


Agilent E8257D PSG Microwave Analog Signal Generator

Option 521 Ultrahigh Output Power,
Frequency Range From 10 MHz to 20 GHz

E8257D-521 maximum output power



Breaking the One-Watt Output Power Barrier

- **Delivers** output power > 1 W (typical) and up to +28 dBm (specified)
- **Eliminates** the need for external switches, amplifiers, couplers, and detectors
- **Meets** power requirements for TWT amplifier evaluation, automated test systems, and antenna testing



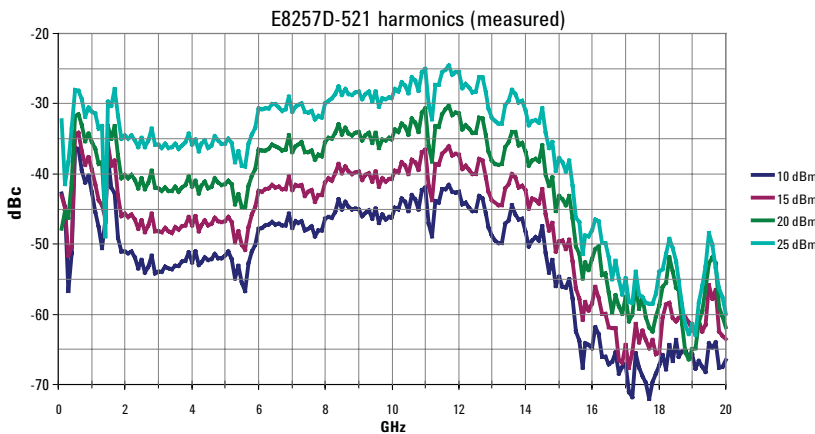
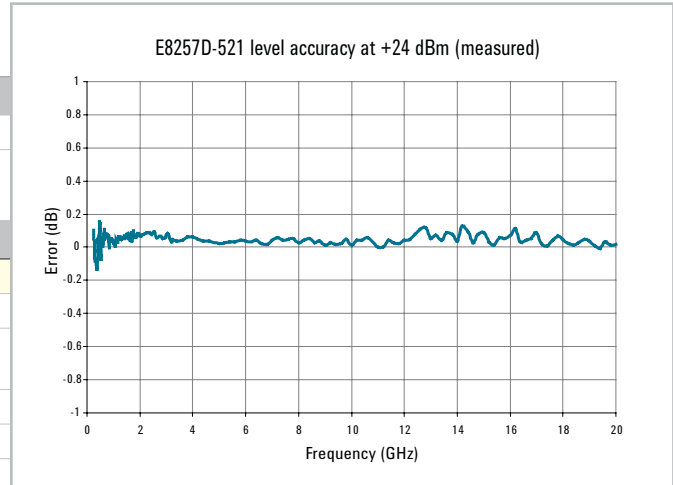
Agilent Technologies

The E8257D PSG is the industry's first microwave analog signal generator to deliver greater than one watt of typical output power. Traditionally, achieving calibrated power levels above +25 dBm over a broad bandwidth up to 20 GHz in an automated system environment requires complex and expensive RF hardware. The PSG with Option 521 dramatically simplifies this high-power test environment, providing greater than +25 dBm of specified output power in a single test instrument. The PSG also protects the power sensitive devices in your system with a built-in power level clamp that can be set from +15 to +33 dBm.

The PSG equipped with Option 521 provides the specified output power required for TWT amplifier evaluation, automated test systems and antenna testing, but also eliminates custom hardware and software development, reduces the physical footprint of the test system, simplifies system calibration, and most importantly reduces your overall cost of ownership over the lifetime of your test program.

Preliminary Specification Summary ¹

Minimum output power (dBm)							
Standard	-15 (settable to -20)						
With Option 1E1 step attenuator	-130 (settable to -135)						
Maximum output power (dBm)							
Frequency range	Standard	Option 1E1					
10 to 250 MHz	+18 (+21 typ)	+18 (+21 typ)					
> 0.25 to 1 GHz	+24 (+27 typ)	+24 (+27 typ)					
> 1 to 6 GHz	+28 (+31 typ)	+27 (+30 typ)					
> 6 to 14 GHz	+26 (+29 typ)	+25 (+28 typ)					
> 14 to 18.6 GHz	+25 (+28 typ)	+24 (+27 typ)					
> 18.6 to 20 GHz	+24 (+27 typ)	+23 (+26 typ)					
Level accuracy (dB)							
Frequency	> 20 dBm	20 to 16 dBm	16 to 10 dBm	10 to 0 dBm	0 to -10 dBm	-10 to -17 dBm	
10 to < 500 MHz ²	—	±1.2 (typ)	±1.2 (typ)	±1.1 (typ)	±1.2 (typ)	±1.3 (typ)	
0.5 to 20 GHz	±1.0	±0.8	±0.8	±0.6	±0.8	±1.2	
Level accuracy with step attenuator (Option 1E1) (dB)							
Frequency	> 20 dBm	20 to 16 dBm	16 to 10 dBm	10 to 0 dBm	0 to -10 dBm	-10 to -70 dBm	-70 to -90 dBm
10 to < 500 MHz ³	—	±1.0	±0.9	±0.9	±0.9	±1.0	±1.1
0.5 to 20 GHz	±1.0	±0.8	±0.8	±0.8	±0.8	±0.9	±1.0
Harmonics							
	dBc at +10 dBm or maximum specified output power, whichever is lower						
	10 to 50 MHz		-25 dBc				
	10 to 50 MHz with filters on		-35 dBc				
	0.05 to 2 GHz		-25 dBc				
	2 to 20 GHz		-35 dBc				



1. Specifications are preliminary and are subject to change without notice.
2. Specifications below 500 MHz are typical and apply for a 50-Ω load with VSWR less than 1.4:1. With filters off, accuracy is typically ±2 dB.
3. Specification below 500 MHz apply with the step attenuator set to 5 dB or higher (requiring Attenuator Hold ON above 8 dBm). With step attenuator set to 0 dB, refer to level accuracy specifications without Option 1E1.

Product specifications and descriptions in this document subject to change without notice.

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