# Keysight 33500B Series Waveform Generators



The Keysight Technologies, Inc. 33500B Series of Waveform Generators with exclusive Trueform Technology offer more capability, fidelity and flexibility than traditional DDS waveform generators. Eight new upgradeable models are available at 20 and 30 MHz with 1- and 2-channels with a full set of standard features, and optional baseband I-Q signal player.

- Sine waves with 5x lower harmonic distortion
- Pulses up to 30 MHz with 10x less jitter
- Point-by-point arbitrary waveforms with sequencing
- 16 bits of resolution with 1 mVpp to 10 Vpp amplitude

### **Key Features**

- Superior signal integrity with Trueform technology providing highest resolution and lowest distortion
- Flexibility to select needed functionality from eight new value-priced models, with ability to upgrade later when your needs change
- Superior user experience with intuitive front panel, complimentary software and localized help and manuals, and access to manuals from mobile devices
- BenchVue software included

#### **Key Characteristics**

- Up to 30 MHz sine and pulse
- Jitter: < 40 ps
- THD: < 0.04%
- Amplitude ranges: 1 mVpp up to 10 Vpp
- 250 MSa/s sampling rate
- 16-bit amplitude resolution
- 1 MSa/channel memory, 16 MSa optional

Learn more at: www.keysight.com



## Step 1.

Choose your bandwidth, number of channels, and arbitrary waveforms

Waveform generator	33509B	33510B	33519B	33520B
Bandwidth	20 MHz	20 MHz	30 MHz	30 MHz
Number of channels	1	2	1	2
Waveform generator with arb	33511B	33512B	33521B	33522B
Bandwidth	20 MHz	20 MHz	30 MHz	30 MHz
Number of channels	1	2	1	2

#### Step 2.

Tailor your generator for more demanding applications

Application	Order Option
Additional memory for long waveforms	MEM (only available on models with arb)
Baseband IQ Player with adjustments	IQP (only available on 33512B/33522B)
Security features with NISPOM	SEC
Ultra-high stability timebase	OCX

#### **KEYSIGHT SERVICES**

Accelerate Technology Adoption. Lower costs.

#### www.keysight.com/find/services

Keysight Services helps you improve productivity and product quality with our comprehensive service offerings of one-stop calibration, repair, asset management, technology refresh, consulting, training, and more.

### Step 3.

Upgrade your waveform generator at any time as your needs change

Upgrade Desired	Order Upgrade Option	
Increase bandwidth to 30 MHz	335BW1U on 1-channel models	
	335BW2U on 2-channel models	
Add arbitrary waveform capability	335ARB1U on 1-channel models	
	335ARB2U on 2-channel models	
Add 16 M memory to arb	335MEM1U on 1-channel arb models	
	335MEM2U on 2-channel arb models	
Add NISPOM and file security	335SECU	
Add IQ baseband signal player to 2-channel arb	335IQPU	
Add high-stability timebase	33500U-OCX (Must return to Keysight)	

Note: Cannot upgrade a 1-channel generator to a 2-channel generator.





