

33500B Series Waveform Generators

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 and benefits:

- 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

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

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 |



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.

For more details on the Keysight 33500B Series waveform generators, see the brochure, Literature number: 5991-0757EN

For more information on Keysight function/arbitrary waveform generators, please visit: www.keysight.com/find/functiongenerators

To find a distributor in your area, go to www.keysight.com/find/distributors



Three-Year Warranty

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