

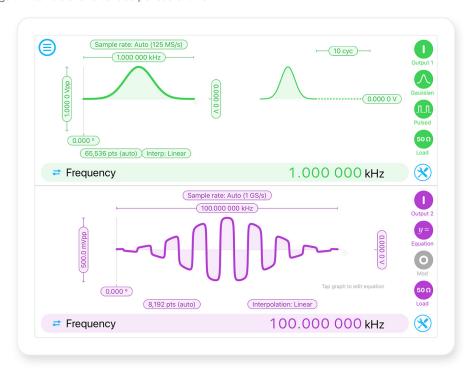


Moku:Lab Instrument Datasheet

300 MHz Arbitrary Waveform Generator



Moku:Lab's Arbitrary Waveform Generator can generate custom waveforms with up to 65,536 points at sample rates of up to 1 GSa/s. Waveforms can be loaded from a file, or input as a piece-wise mathematical function with up to 32 segments, enabling you to generate truly arbitrary waveforms. In pulsed mode, waveforms can be output with more than 250,000 cycles of dead time between pulses, allowing you to excite your system with an arbitrary waveform at regular intervals over extended periods of time.



Maximum Sample rate
1 GSa/s

Output Bandwidt 300 MHz

DAC Resoluti
16-bits

Independent triggering Burst/Pulsed

Supported Waveforms
5 predefined, segmented equations
(up to 32) or custom

Features

- Two independent AWG channels with 300 MHz bandwidth
- Choose between one of the preset waveforms, load points from a file or input an equation directly
- Phase synchronization output between the two channels
- Configure pulsed output with up to 250,000 cycles of dead time between pulses

Specifications

- Supported waveforms: sine, Gaussian, exponential fall, exponential rise, sinc, equation editor, custom (from file)
- Output bandwidth (-3 dB): 300 MHz
- Output voltage: 2 Vpp into 50 $\boldsymbol{\Omega}$
- DC offset: $\pm\,1\,V$ with 100 μV resolution
- Phase offset: 0° to 360° with 0.001° resolution
- Maximum output rate:
 125 MSa/s with 65,536 points
 250 MSa/s with 32,758 points
 500 MSa/s with 16,384 points
 1 GSa/s with 8192 points

Applications

- Random pattern scanning
- System response simulation
- · Additive manufacturing
- · Quantum optics