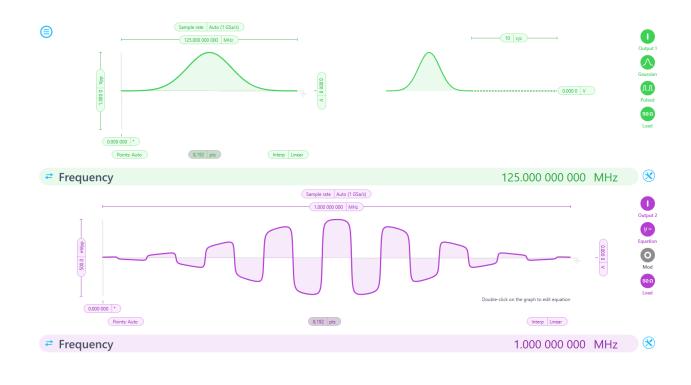
Moku:Lab Instrument Datasheet Arbitrary Waveform Generator



The Moku:Lab 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/sOutput bandwidth
300 MHzDAC resolution
16-bitsIndependent triggering
Burst/PulsedSupported waveforms
6 predefined, segmented equations
(up to 32), or custom

Features

- Two independent AWG channels that can generate DC 125 MHz waveforms
- 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, cardiac, equation editor, custom (from file)
- Output bandwidth: 300 MHz
- Output voltage: 2 Vpp into 50 $\boldsymbol{\Omega}$
- DC offset: 2 Vpp with 100 μV resolution
- Phase offset: 0° to 360° with 0.00 001° resolution
- Maximum output rate: 125 MSa/s with 65,536 points 250 MSa/s with 32,768 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