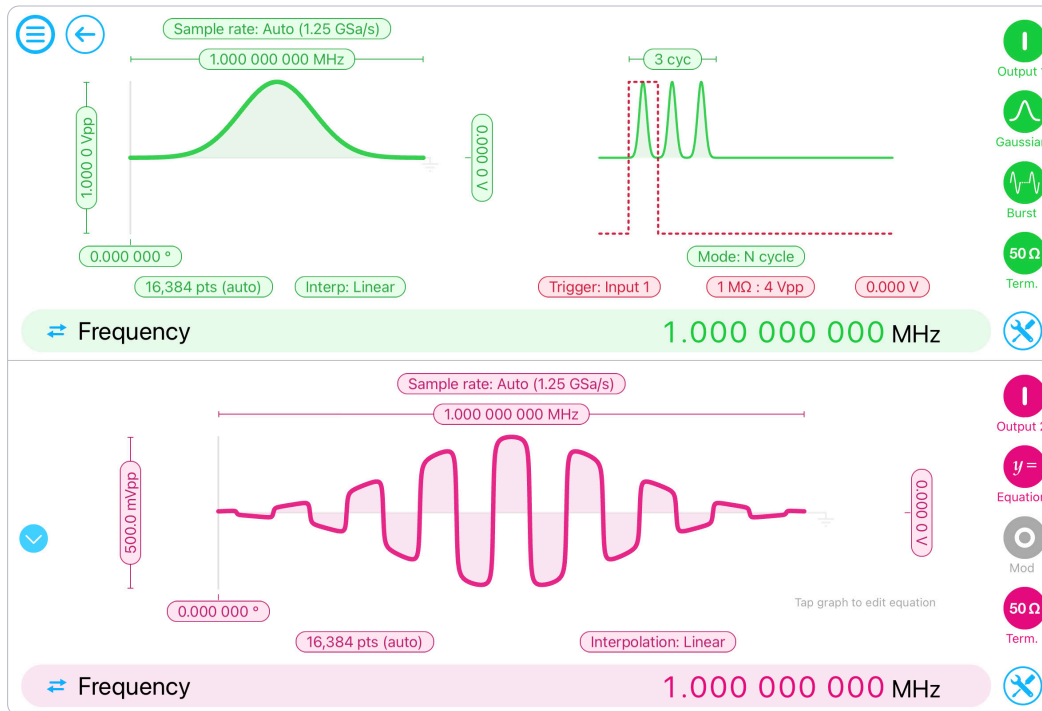




# Arbitrary Waveform Generator



The Moku:Pro four-channel Arbitrary Waveform Generator can generate four custom waveforms with up to 65,536 points and sample rates ranging from 312.5 MSa/s to 1.25 GSa/s. Load waveforms from a file or input as a piece-wise mathematical function with up to 32 segments, enabling you to generate truly arbitrary waveforms. In burst mode, waveform generation can be triggered from input channels with start or n cycle modes. In pulsed mode, waveforms can be output with more than 250,000 cycles of dead time between pulses.



<b>Maximum Sample Rate</b> 1.25 GSa/s	<b>Output Bandwidth</b> Up to 500 MHz	<b>DAC Resolution</b> 16-bits	<b>Independent Triggering</b> Burst/Pulsed	<b>Supported Waveforms</b> 5 predefined, segmented equations (up to 32) or custom
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## Features

- Four independent AWG channels with up to 500 MHz bandwidth
- Choose between preset waveforms, load points from a file, or input an equation directly
- Phase synchronization output between the four 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, and custom (from file)
- Output bandwidth:
  - 10 Vpp @ 312.5 MSa/s
  - 2 Vpp @ 625 MSa/s and 1.25 GSa/s
- DC offset:  $\pm 5$  V with 100  $\mu$ V resolution
- Phase offset: 0° to 360° with 0.001° resolution
- Maximum output rate:
  - 312.5 MSa/s with 65,536 points
  - 625 MSa/s with 32,768 points
  - 1.25 GSa/s with 16,384 points

## Applications

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