



# 250 MHz Spectrum Analyzer



Moku:Lab's Spectrum Analyzer allows you to observe input signals in the frequency domain between DC and 250 MHz. View two channels of data simultaneously with a resolution bandwidth as low as 1 Hz over a minimum span of 100 Hz. The Spectrum Analyzer also features two integrated waveform generators capable of producing sine waves at up to 250 MHz.



|   |  |                            |   |                                       |  |
|---|--|----------------------------|---|---------------------------------------|--|
| <b>Frequency Range</b><br>DC to 250 MHz | <b>Frequency Span</b><br>100 Hz to 250 MHz | <b>Minimum RBW</b><br>1 Hz | <b>Video Filter Bandwidth</b><br>10 Hz to 2.4 MHz | <b>Singal Generator</b><br>Integrated | <b>Output Frequency</b><br>up to 250 MHz |
|---|--|----------------------------|---|---------------------------------------|--|

## Features

- High bandwidth input and output options: display and record power spectra or power spectral densities in the frequency domain from DC to 250 MHz
- Generate two sine waves up to 250 MHz using Moku:Lab's built-in analog outputs
- Quickly measure key metrics by dragging measurement cursors onto features of interest using the iPad's multi-touch interface
- Python, MATLAB, and LabVIEW APIs for advanced programming support

## Specifications

- Frequency range: DC to 250 MHz
- Frequency span: 100 Hz to 250 MHz
- Resolution bandwidth (RBW): span dependent, minimal RBW is 1 Hz
- Number of inputs: 2
- Input range: 1 Vpp or 10 Vpp
- Input impedance: 50 Ω / 1 MΩ
- Noise floor: -130 dBm with 1 Vpp input range, 1 Hz RBW
- Number of outputs: 2
- Output frequency range: 1 mHz to 250 MHz
- Output voltage: 2 Vpp into 50 Ω

## Applications

- Frequency domain analysis
- System response characterization
- Noise measurement
- RF system design
- Spurious signal identification