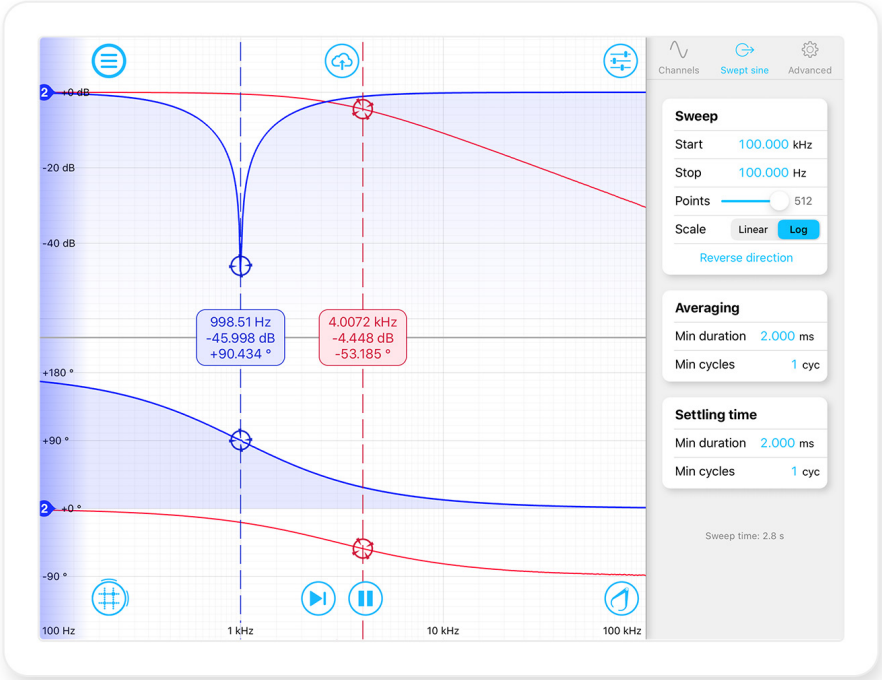
Moku:Lab Instrument Datasheet

120 MHz Frequency Response Analyzer

Moku:Lab's Frequency Response Analyzer enables you to measure the frequency response of a system in both magnitude and phase using a swept sine output from 10 mHz to 120 MHz. Select from between 32 and 512 points per sweep and configure settling and averaging times to balance total sweep duration and signal-to-noise ratio.



Frequency Range	Input Impedance	Averaging time	Sweep	Output Voltage Range	Harmonics Detection
Up to 120 MHz	**50 Ω or 1 MΩ**	**1 µs to 10 s**	**Linear/Logarithmic**	**2 Vpp into 50 Ω**	**Up to 15th**

Features

- Linear or logarithmic swept sine output
- Math channel to add, subtract, multiply or divide response functions as they are acquired
- Use cursors and markers to measure exact values on the plots
- Measurement averaging and settling times are highly configurable
- Easily save data and upload to the cloud or Dropbox in common formats
- Probe two systems simultaneously, or one system at two points
- Demodulate up to 15th harmonic

Specifications

- Frequency range: 10 mHz to 120 MHz
- Averaging time: 1 µs to 10 s
- Settling time: 1 µs to 10 s
- Sweep points: 32, 64, 128, 256, 512
- Source impedance: 50 Ω
- Output Voltage Range: 2 Vpp
- Input Impedance: 50 Ω or 1 MΩ
- Input voltage range: 1 Vpp or 10 Vpp
- Noise-floor: 10 mHz to 100 kHz: -100 dB
  100 kHz to 1 MHz: -125 dB
  1 MHz to 50 MHz: -130 dB
  50 MHz to 120 MHz: -120 dB

Applications

- Impedance measurement
- Capacitance/inductance measurement
- Stability analysis
- Power supply analysis
- EMI filter characterization