Spectrum Analyzer

Description

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.

Features

- DC to 250 MHz frequency range
- 1 kHz to 250 MHz frequency span
- Quickly measure important metrics by dragging measurement cursors onto features of interest using the iPad's multi-touch interface
- View spectral data in units of Volts or dBm as either power or power spectral density

Specifications

Frequency

Frequency

Range	DC to 250 MHz
Span	1 kHz to 250 MHz

Resolution bandwidth (RBW)

Modes	Auto	Automatically sets the RBW based on the current span and window function
	Manual	Allows the user to manually set the RBW within the limits tolerated by the span and window function
	Min	Sets the RBW at the minimum possible value for the current span and window function The minimum RBW is 1 Hz
Windows	None (uniform), Hanning, Flat Top, Blackman-Harris	

Amplitude

Voltage

Channels	2
Input coupling	AC / DC
Input impedance	50 Ω / 1 MΩ
Input attenuation	0 dB / 20 dB
Input bandwidth (-3 dB)	> 200 MHz into 50 Ω > 180 MHz into 1 MΩ
Input voltage range	± 0.5 V into 50 Ω with 0 dB attenuation ± 5 V into 50 Ω with 20 dB attenuation
Input voltage sensitivity	-130 dBm with 0 dB attenuation at minimum RBW

Display

Scales	Volts, dBm
Display modes	Power, Power Spectral Density (PSD)
Video bandwidth (VBW)	10 Hz to 2.4 MHz depending on span
Averages	1 to 100
Persistence	100 ms to 10 s, infinite, off

Synthesizer

Synthesizer

Channels	2
Output impedance	50 Ω
Waveforms[13]	Sine
Output frequency range	1 mHz to 250 MHz
Sweep mode	Sweeps the output frequency across the current span with a fixed sweep period of 5 seconds
Output voltage range	± 1 V into 50 Ω

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[13] Modulation not available for waveforms synthesized using the oscilloscope instrument.