

General Description

The SIGLENT SSA3000X-R real-time spectrum analyzers are powerful and flexible tools for complex RF spectrum, signal analysis and network analysis.

With a capability of 40 MHz analysis bandwidth and 7.2 μ s 100% POI, the analyzer can provide multi-dimensions data displays, advanced triggering, and RF data capturing, to solve modern RF spectrum challenges, like hopping frequency, conflict channel, spectrum interference, and analog/digital modulation analysis, EMI pre-compliance test. They also provide a 1-path-2-port vector network analyzer and a distance-to-fault locator for S-parameter measurement, cable and antenna testing.

Applications include broadcast monitoring/evaluation, cellular site, IoT, Wlan and Bluetooth, surveying, research and development, education, production, and maintenance.

Features and Benefits

- ◆ Spectrum Analyzer Frequency Range from 9 kHz up to 7.5 GHz
- ◆ Vector Network Analyzer Frequency Range from 100 kHz up to 7.5 GHz
- ◆ -165 dBm/Hz Displayed Average Noise Level (Typ.)
- ◆ -98 dBc/Hz.@10 kHz Offset Phase Noise (1 GHz, Typ.)
- ◆ Level Measurement Uncertainty < 0.7 dB (Typ.)
- ◆ 1 Hz Minimum Resolution Bandwidth (RBW)
- ◆ Preamplifier and Tracking Generator Standard
- ◆ Up to 40 MHz Real Time Analysis Bandwidth (Opt.)
- ◆ 100% POI 7.20 μ s, Dynamic Range 60 dB, Multi-view for Density, Spectrogram, PvT and 3D
- ◆ Distance To Fault
- ◆ Advanced Measurement Kit (Opt.)
- ◆ Modulation Analysis Mode (Opt.)
- ◆ EMI Measurement Mode (Opt.)
- ◆ 10.1 inch Multi-Touch Screen , Mouse and Keyboard supported
- ◆ Web Browser Remote Control on PC and Mobile Terminals and File Operation

Models and Main index

Model	SSA3032X-R	SSA3050X-R	SSA3075X-R
Frequency Range	9 kHz~3.2 GHz	9 kHz~5.0 GHz	9 kHz~7.5 GHz
Resolution Bandwidth	1 Hz~3 MHz	1 Hz~3 MHz	1 Hz~3 MHz
Displayed Average Noise Level	-165 dBm/Hz	-165 dBm/Hz	-165 dBm/Hz
SSB Phase Noise	<-98 dBc/Hz	<-98 dBc/Hz	<-98 dBc/Hz
Third-order intercept(TOI)	+14 dbm	+14 dbm	+14 dbm
Total Amplitude Accuracy	< 0.7 dB	< 0.7 dB	< 0.7 dB
Tracking Generator	100 kHz - 3.2 GHz	100 kHz - 5.0 GHz	100 kHz - 7.5 GHz
Real Time Band Width	25 MHz, 40 MHz (Option)		
RTSA SFDR	60 dB		
100% POI	7.20 μ s		
RTSA Measurement	Density, Spectrogram, 3D, PvT		
VNA measurement	Vector S11, Vector S21		
VNA Dynamic Range	90 dB		
Distance to Fault	Timing Domain Analysis Locator		
Touch Screen	Multi Touch, Mouse and Keyboard supported		
Advanced Measurement	CHP, ACPR, OBW, CNR, Harmonic, TOI, Monitor		
Modulation Analysis	AM, FM, ASK, FSK, MSK, PSK, QAM		
EMI Measurement	EMI Filter and Quasi-Peak Detector, Log Scale and Limit Line		
Communication Interface	LAN, USB Device, USB Host (USB-GPIB)		
Remote Control Capability	SCPI/Labview/IVI based on USB-TMC/VXI-11/Socket/Telnet		
Remote Controller	NI-MAX, Web Browser, Easy Spectrum software, File Explorer		