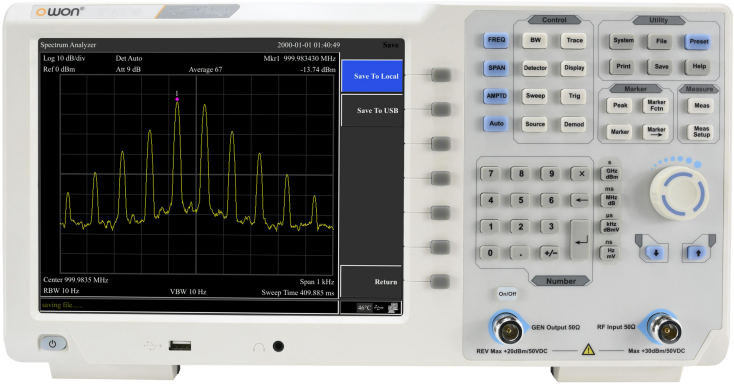

XSA1000TG Series
Spectrum Analyzer

+ Frequency Range from 9 kHz up to3.6 GHz
+ 150dBm Displayed Average Noise Level
+ Phase Noise -82dBc/Hz @1Gz and offset at 10KHz
+ Total Amplitude Accuracy <1.5dB
+ 10Hz Minimum Resolution Bandwidth (RBW)
+ EMI Pre-compliance Test Kit
+ Up to 3.6 GHz Tracking Generator Kit
+ 10.4 inches display

+ Performance Specifications

Model	XSA1015TG	XSA1032TG	XSA1036TG
Frequency			
Range	9kHz-1.5 GHz	XSA1032TG	9kHz-3.6 GHz
Resolution	1Hz		
Frequency span			
Range	0 Hz，100 Hz to maximum frequency of device		
Accuracy	± span /（swept points -1）		
Internal reference			
Reference frequency	10.000000 MHz		
Reference frequency accuracy	±[（days from last calibrate × freq aging rate）+ temperature stability + initial accuracy]		
Temperature stability	<2.5ppm （15℃ to 35℃）		
Aging rate	<1ppm/year		
Readout			
Marker frequency resolution	span/（the number of sweep points -1）		
Uncertainty	±（freq indication × freq reference uncertainty +1%× span +10%× resolution bandwidth + Marker Frequency Resolution）		
Frequency counter			
Resolution	1 Hz，10 Hz，100 Hz，1 kHz		
Accuracy	±（marker freq × freq reference uncertainty + counter resolution）		
Bandwidth			
Resolution bandwidth (-3 dB)	10Hz to 500kHz（in 1 to 10 sequence），1MHz，3MHz		
Resolution filter shape factor	<5：1 nominal（Digital implement, similar to Gauss Pattern）		
Accuracy	<5% nominal		
Video bandwidth (-3 dB)	10Hz to 3MHz		

Amplitude Specification	
Amplitude and electric level	
Amplitude measurement range	DANL to +20 dBm， close the preamplifier
Reference electric level	-80 dBm to +30 dBm，0.1dBm steps
Preamplifier	20 dB，nominal
Input attenuator range	0~39 dB，3 dB steps
Max input DC voltage	50 VDC
Max continuous power	30dBm，average continuous power
Displayed average noise level (DANL) Input attenuation 0 dB，1Hz resolution bandwidth	
Preamp off	1 MHz~10 MHz -140dBm（nominated）
	10 MHz~1GHz -140dBm（nominated）
	XSA1015TG:1GHz~1.5 GHz -138 dBm(nominated) XSA1032TG:1GHz~3.2GHz -138 dBm(nominated) XSA1036TG:1GHz~3.6 GHz -138 dBm(nominated)
Preamp on	1 MHz~10 MHz -160dBm（nominated）
	10 MHz~1GHz -160dBm（nominated）
	XSA1015TG: 1GHz~1.5 GHz -158 dBm(nominated) XSA1032TG: 1GHz~3.2 GHz -158 dBm(nominated) XSA1036TG: 1GHz~3.6 GHz -158 dBm(nominated)
Phase noise	20 ℃ ~30 ℃，fc=1 GHz
Phase noise	<-82 dBc/Hz @10 kHz offset
	<-100 dBc/Hz @100 kHz offset
	<-110 dBc/Hz @1 MHz offset
Level display range	
Log scale coordinate	1dB ~255dB
Linear scale coordinate	0 to reference level
level unit	dBm, dBuW, dBpW, dBmV, dBuV, W,V
Points	201~1001
Number of traces	5
Detectors	Positive-peak, negative-peak, sample, normal, RMS
Trace functions	Clear write, Max Hold, Min Hold, View, Blank, Average
Frequency response	
	20℃ ~30℃，30%~70% relative humidity, 20 dB input attenuation, reference 50 MHz
Preamp off	±0.8 dB；
Preamp on	±0.9 dB；
Accuracy	
Input Attenuation Switching Uncertainty	20℃ ~30℃， fc=50 MHz，Preamplifier Off， 20dB RF attenuation，input signal 1~40 dB ±0.5 dB

Absolute Amplitude Uncertainty	20℃ ~30℃， fc=50 MHz，RBW=1 kHz，VBW=1 kHz，peak detector, 20 dB RF attenuation， Preamplifier Off ±0.4 dB，input signal= -20dBm Preamplifier On ±0.5 dB, input signal= -40dBm		
Uncertainty	input signal range 0dbm~-50dbm		
	±1.5 dB		
VSWR	input 10 dB RF attenuation，1 MHz~1.5GHz		
	<1.5，nominal		
Distortion and spurious response			
Second harmonic distortion	fc ≥ 50 MHz，Preamp off, signal input -30 dBm, 0 dB RF attenuation, 20 ℃ to 30 ℃		
	-65dbc		
Third-order intermodulation	fc ≥ 50 MHz		
	+10 dBm		
1 dB Gain Compression	fc ≥ 50 MHz， 0 dB RF attenuation，Preamp off , 20 ℃ to 30 ℃		
	+2 dBm, nominal		
Residual response	connect 50 Ω load at input port，0 dB input attenuation，20 ℃ to 30 ℃		
	<-85dBm，nominated		
Input related spurious	-30 dBm signal at input mixer，20 ℃ to 30 ℃		
	<-60 dBc		
Sweep time and triggering			
Span range	100Hz≤SPAN≤3GHz 10ms to 3000s zero sweep width 1ms to 3000s		
Mode	Continue, single		
Trigger	Free run, video		
Tracking generator			
Output frequency range	100 kHz~1.5 GHz	100 kHz~3.2 GHz	100 kHz~3.6 GHz (Tracking generator) 35 MHz~3.6 GHz (Tracking generator)
Output power level range	-30 dBm~0 dBm ，		
Output power level resolution	1dB		
Output flatness	+/-3 dB		
Maximum safe reverse level	Average total power：30 dBm，DC：±50 VDC		
Inputs and Outputs			
Front panel RF input connector	50 Ω，N-type female		
Front panel track generator output	50 Ω，N-type female		
10 M reference input	50 Ω，N-type female		
Communication port	USB HOST, USB DEVICE, LAN, earphone port, REF and VGA		
General techincal specification			
Display	TFT LCD，10.4 inches		
Weight (without package)	About 5 kg		
Dimension (W × H × D)	421 × 221 × 115 (mm)		

Working temperature	0~40 ℃
Storage temperature	-20 °C to +60 °C
Power	100V~240V 50/60Hz