

XSA800 Series Spectrum Analyzer Specifications

All technical specifications are guaranteed when the following conditions are met, unless otherwise stated:

- The instrument has been preheated for 30 minutes before use.
- The instrument is in the calibration cycle and has been self-calibrated.

"Typical" and "nominal" for this product are defined as follows

- Typical: Refers to the performance of the product under certain conditions.
- Nominal: Refers to the approximate value under product application process.

Frequency			
Frequency Range	XSA805 (TG)	9 kHz to 500.009 MHz	
	XSA810 (TG)	9 kHz to 1.000009 GHz	
	XSA815 (TG)	9 kHz to 1.500009 GHz	
Frequency Resolution	1 Hz		
Frequency Span			
Span Range	0 Hz, 100 Hz to max frequency of instrument		
Span Uncertainty	± span / (sweep points-1)		
SSB Phase Noise(20°C to 30°C,fc=1 GHz)			
Carrier Offset	10 kHz	< -80 dBc/Hz	
	100 kHz	< -100 dBc/Hz	
	1 MHz	< -115 dBc/Hz	
Bandwidth			
Resolution Bandwidth (-3 dB)	1 Hz to 1 MHz, in 1-3-5-10 sequence		
RBW Accuracy	< 5% typical		
Resolution Filter Shape Factor (60 dB : 3 dB)	<5 typical		
Video Bandwidth (-3 dB)	10 Hz to 1 MHz, in 1-3-5-10 sequence		
Amplitude and level			
Amplitude measurement range	DANL to +10 dBm,100 kHz to 10 MHz, Preamp Off DANL to +20 dBm,10 MHz to 1.5 GHz, Preamp Off		
Reference Level	-80 dBmto+30 dBm,0.01dB by step		
Preamp	20 dB, nominal, 100 kHz to 1.5 GHz		
Input Attenuator	XSA805 (TG) XSA810 (TG) XSA815 (TG)	0 to 40 dB,1 dB by step	
Display Average Noise Level (Input attenuation = 0 dB, RBW = VBW = 100 Hz, sample detector, trace average ≥ 50, 20°C to 30°C, input impedance = 50 Ω)			
Preamp Off	9 kHz to 1 MHz		-95 dBm (Typical), <-88 dBm
	1 MHz to 500 MHz		-140 dBm (Typical), <-130dBm
	XSA810(TG)	500 MHz to 1 GHz	
	XSA815(TG)	500 MHz to 1.5 GHz	-138 dBm (Typical),<-128 dBm

Preamp On	100 kHz to 1 MHz		-135 dBm (Typical), <-128 dBm
	1 MHz to 500 MHz		-160 dBm (Typical),<-150 dBm
	XSA810(TG)	500 MHz to 1 GHz	
	XSA815(TG)	500 MHz to 1.5 GHz	-158 dBm (Typical),<-148 dBm
Frequency response (20°C to 30°C,30% to 70% relative humidity, input attenuation=10 dB, reference frequency= 50 MHz)			
Preamp Off (fc≥9kHz)	<0.7 dB		
Preamp On (fc≥50 MHz)	<1.0 dB		
Difference and Accuracy			
Uncertainty	fc = 50 MHz, peak detector, preamplifier off, attenuation = 10 dB, input signal level = -10 dBm, 20°C to 30°C		
	< 0.4 dB		
Tracking Generator (optional)			
Frequency Range	XSA805 (TG)	100 kHz to 500.009 MHz	
	XSA810 (TG)	100 kHz to 1.000009 GHz	
	XSA815 (TG)	100 kHz to 1.500009 GHz	
Output power level range	-40 dBm to 0 dBm		
Output level resolution	1 dB		
Output flatness	Relative to 50 MHz ± 3 dB		
Tracking generator spurious	Harmonic spurious	-30 dBc (Tracking generator output power -10 dBm)	
	Non-harmonic spurious	-40 dBc (Tracking generator output power -10 dBm)	
Tracking generator to input terminal isolation	-60 dB (Tracking generator output power 0 dBm)		
USB			
USB Host			
Connector	A Plug		
Protocol	USB 2.0		
USB Device			
Connector	B Plug		
Protocol	USB 2.0		
Display			
Type	TFT LCD		
Resolution	1280*800		
Size	9 inches		
Color	65536		
Remote Control			
LAN	10/100Base,RJ-45		
HDMI	Connector A Plug		
	Protocol	Version 1.4	

Appearance	
Dimensions	375 mm (W) × 185 mm (H) × 120 mm (D)
Weight	Approx. 3.7 kg (without package)

V1.0.0