

XSA1000P Series Spectrum Analyzer

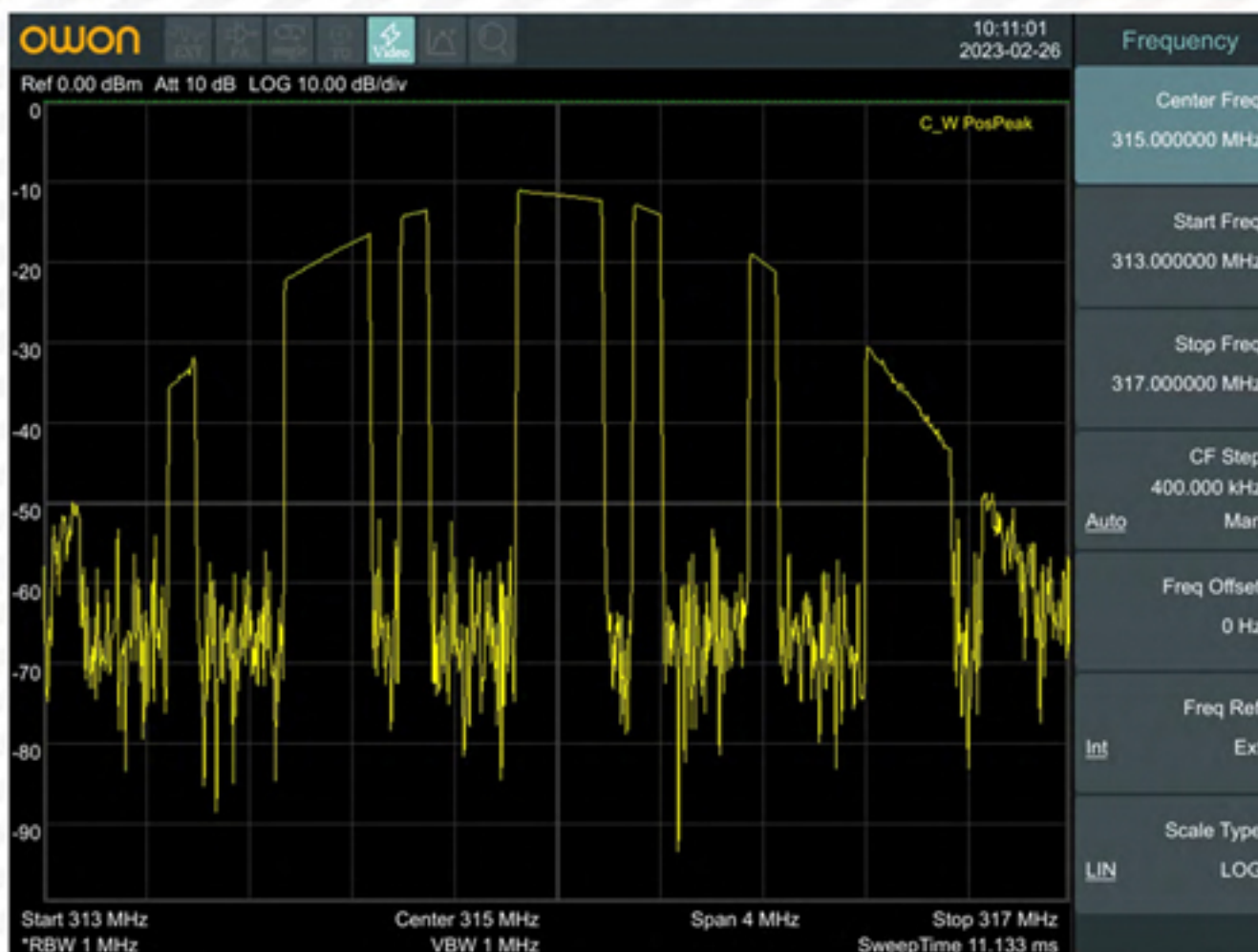


- Frequency range 9kHz - 7.5GHz
- -163 dBm Displayed Average Noise Level (DANL)
- Phase noise -106 dBc/Hz @1GHz and offset at 10 kHz
- Total amplitude accuracy <math><0.7\text{ dB}</math>
- 1 Hz minimum resolution bandwidth (RBW)
- EMI pre-compliance test kit, optional EMC test software
- Waterfall plot graphic, modulation signal quality analysis, audio demodulation, ect. multiple general and extended test functions.
- Standard Pass/Fail on-site test and alert function
- Adopt all-digital intermediate frequency technology
- Multiple interfaces: USB Host, USB Device, LAN, earphone interface, HDMI
- 10.4-inch multi-touch screen

1Hz minimum resolution bandwidth (RBW), effectively distinguishing the nearby signals

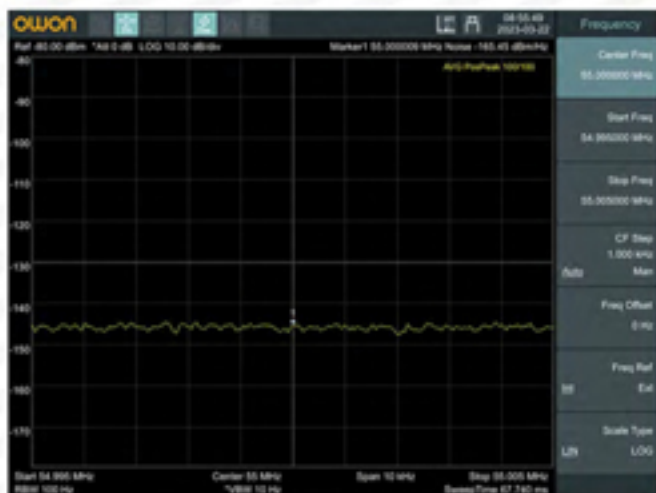


Quick capture function



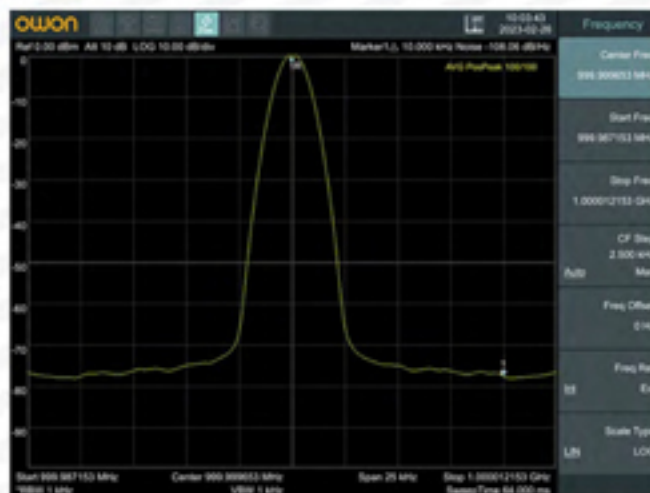
Car remote keys, TPMS tire pressure modules and small wireless modules usually use ASK/FSK modulation. XSA800 can complete the capture of ASK/FSK signals, and directly obtain its center frequency, power and offset parameters.

Excellent small signal measurement capability



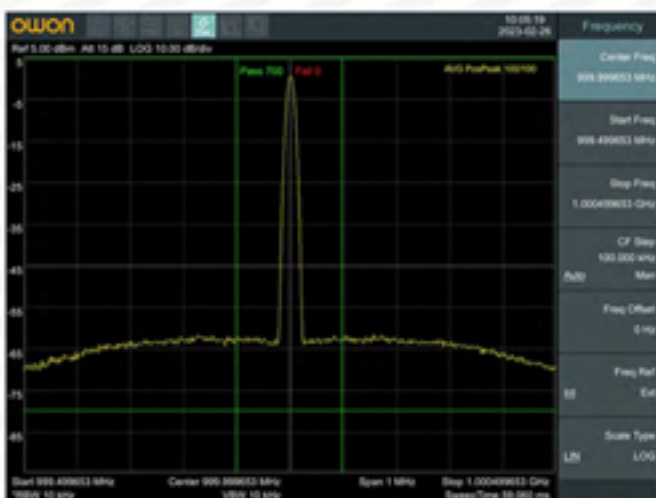
-163 dBm DANL (Displayed Average Noise Level), can observe weaker small signals

More accurate low-noise measurements



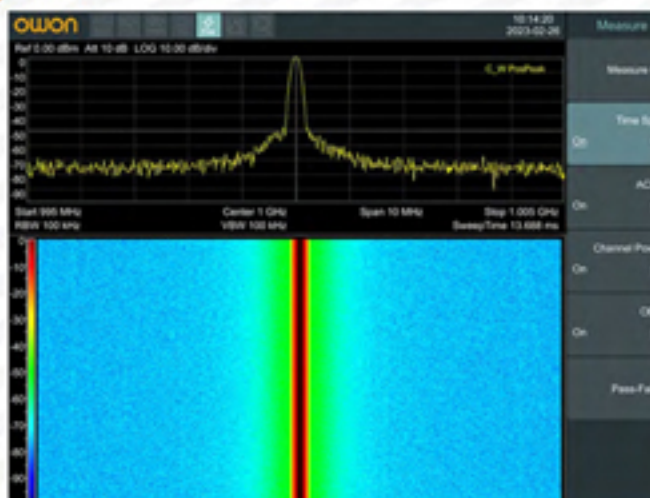
Phase Noise $< -106 \text{ dBc/Hz}$ @1GHz at 10 kHz offset

Pass/Fail function



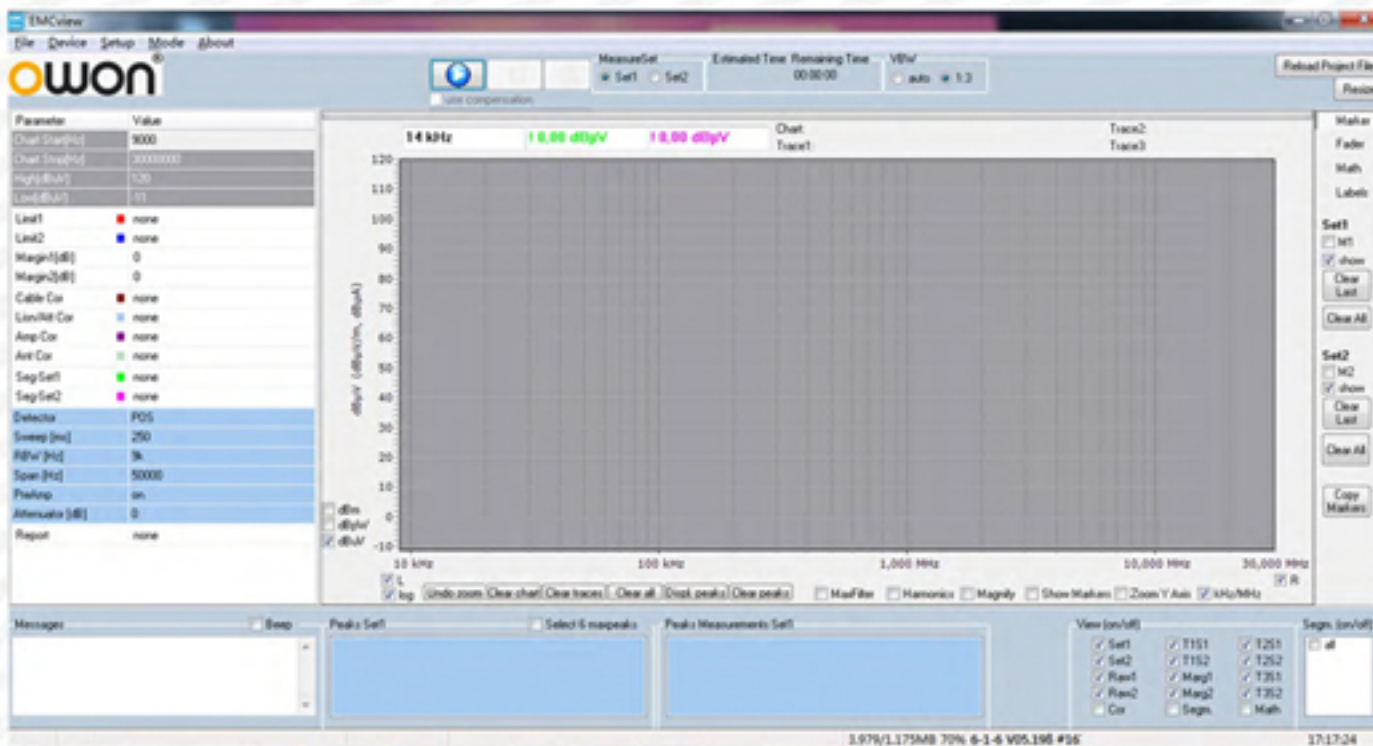
Quickly determine if the test results pass

Waterfall plot graphic



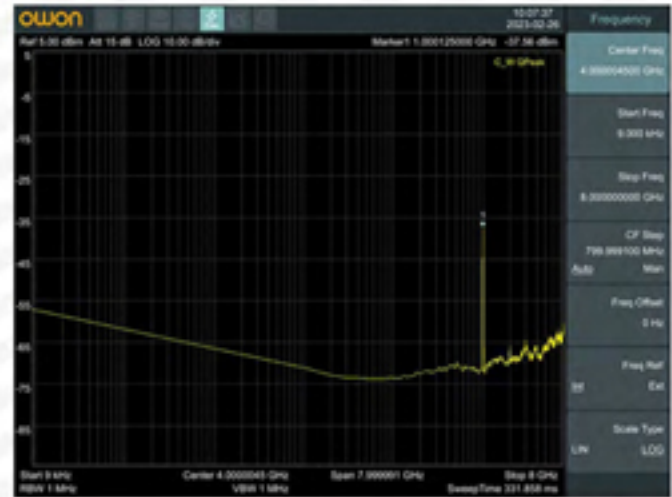
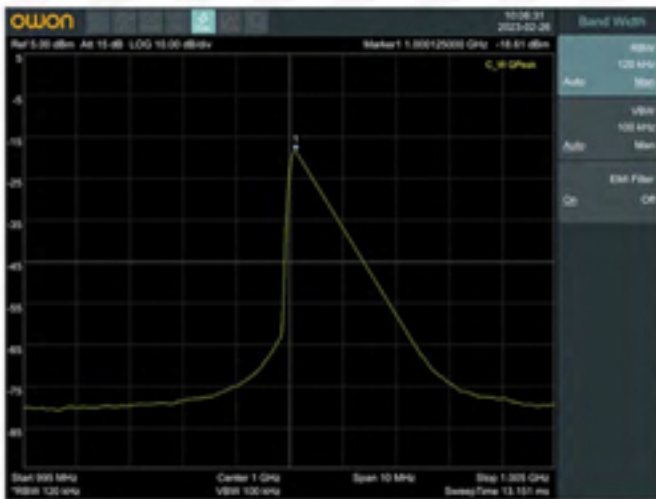
View the behavior of varying signal parameters over time, track the frequency and power behavior over the time, particularly intermittent signals. The user can use waterfall plot graphic to analyze the stability of a signal over the time, or to identify intermittent interference signals in communications systems.

Provide EMC test function (requires optional software)



Built-in more than 200 mainstream EMC test standards and regulations templates. The user selects the corresponding template, and the software automatically sets the spectrum analyzer and records the test data. The data and regulations can be compared on the same screen. Users can also customize regulations for comparative analysis.

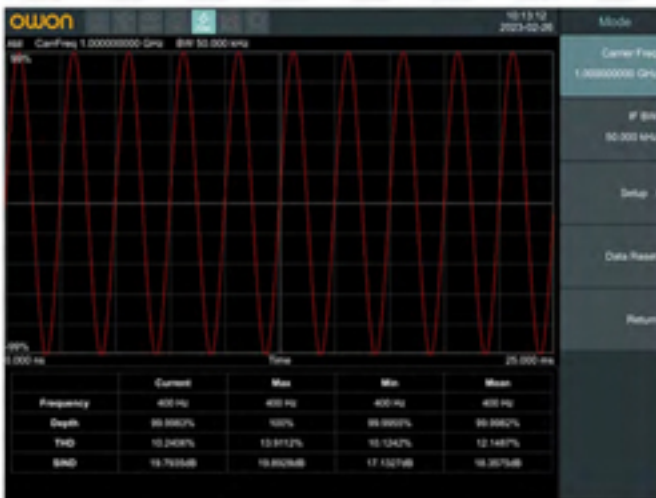
Provides EMI pre-compliance test function



Equipped with EMI filter (6dB) and quasi-peak detector as standard, it is more accurate for EMI pre-test and diagnosis, and complete testing and production report can be completed by using supporting software.

Provide multiple extended function modes

Standard modulation signal quality analysis, audio demodulation, field strength measurement, channel measurement and frequency counter, ect. multiple general and extended test functions.



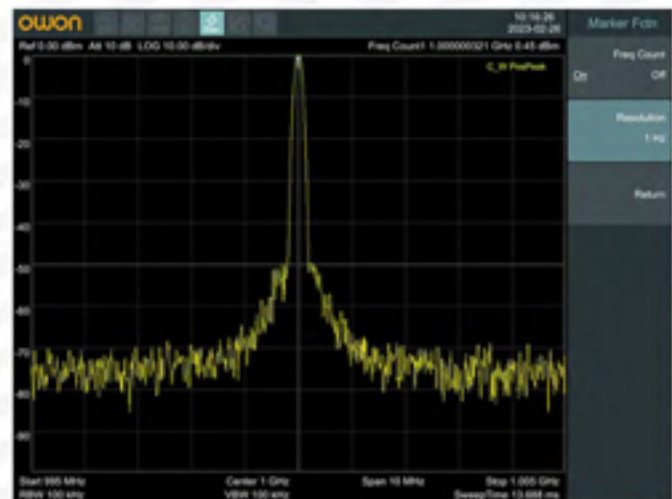
modulation signal quality analysis



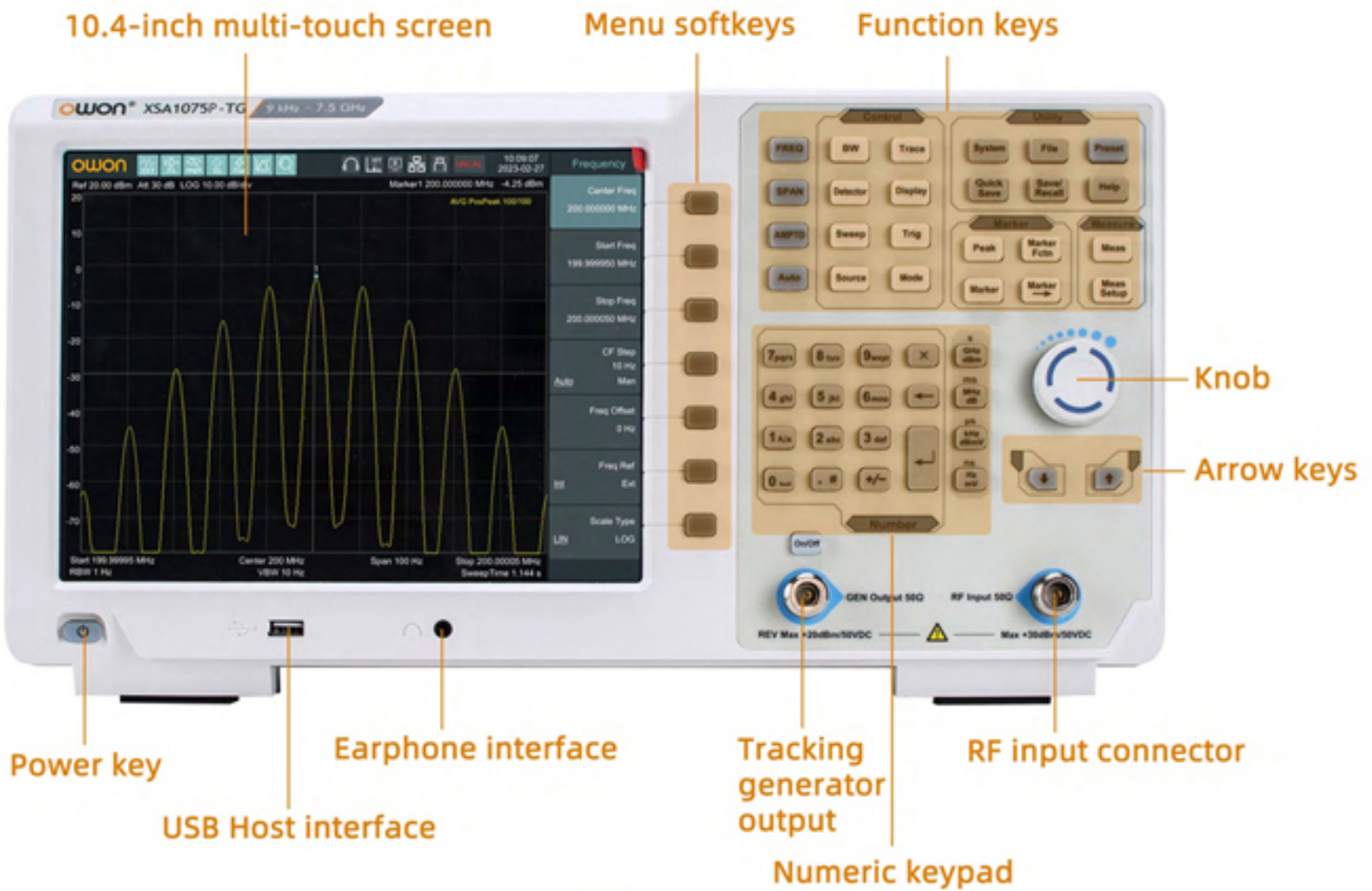
audio demodulation



channel measurement



frequency counter



Weight: Approx. 5kg (main device)
Dimensions: 375 mm (W)× 185 mm (H) ×120 mm (D)

Model	XSA1015P(TG)	XSA1032P(TG)	XSA1036P(TG)	XSA1075P(TG)
Frequency				
Range	9kHz-1.5GHz	9kHz-3.2GHz	9kHz-3.6GHz	9kHz-7.5 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 MHz			
Aging rate	<1ppm/year			
Readout				
Marker frequency resolution	span/(the number of sweep points -1)			
Bandwidth				
Resolution bandwidth (-3 dB)	1Hz to 1MHz step by 1-3-5-10			
Resolution filter shape factor	<5 nominal(Digital implement, similar to Gauss Pattern)			
Accuracy	<5% nominal			
Video bandwidth (-3 dB)	10Hz to 3MHz step by 1-3-5-10			
Resolution bandwidth (-6 dB) (EMI optional)	200 Hz, 9 kHz, 120 kHz, 1 MHz			
Amplitude Specification				
Amplitude and electric level				
Amplitude measurement range (XSA1015P)	DANL to +10 dBm, 100kHz to 10MHz, close the preamplifier DANL to +20 dBm, 10MHz to max frequency , close the preamplifier			
Max input DC voltage	50 VDC			
Max. continuous wave RF power	+20 dBm (100 mW), attenuation = 40 dB			
Max. damage level	+30 dBm (1W)			
Displayed average noise level(DANL) attenuation = 0 dB, RBW = VBW = 100 Hz, sample detector, trace average ≥ 50, 20°C to 30°C , input impedance = 50 Ω				
Preamp off	-95 dBm (typical), < -88 dBm (9 kHz to 1 MHz)			
	-140 dBm (typical), <-130dBm (1MHz - 500MHz)			
	-138 dBm (typical), <-128 dBm (500MHz - 3.2GHz)			
	-138 dBm (typical), <-128 dBm (500MHz - 3.6GHz)			
	-134 dBm (typical), <-124 dBm (3.6GHz - 6GHz)			
	-129 dBm (typical), <-119 dBm (6GHz - 7.5GHz)			
Preamp on	-135dBm (typical), <-128 dBm (100kHz - 1 MHz)			
	-160 dBm (typical), <-150 dBm (1MHz - 500MHz)			
	-158 dBm (typical), <-148 dBm (500MHz - 3.2GHz)			
	-158 dBm (typical), <-148 dBm (500MHz - 3.6GHz)			
	-154 dBm (typical), <-144 dBm (3.6GHz - 6GHz) (XSA1075P)			
	-149 dBm (typical), <-139 dBm (6GHz - 7.5GHz) (XSA1075P)			

Phase noise (20 °C to 30 °C, fc=1 GHz)				
Phase noise	<-106 dBc/Hz @10 kHz offset,			
	<-104 dBc/Hz @100 kHz offset			
	<-115 dBc/Hz @1 MHz offset			
Level display range				
level unit	dBm, dBuW, dBpW, dBmV, dBuV, W, V			
Number of traces	8			
Detectors	Positive-peak, negative-peak, sample, normal, RMS, Average, quasi-peak (with EMI option)			
Trace functions	Clear write, Max Hold, Min Hold, View, Blank, Average, Trace math			
Frequency response (20°C to 30°C, 10 dB input attenuation, reference 50 MHz)				
Preamp off(fc≥9KHz)	< 0.7dB;			
Preamp on(fc≥9KHz)	< 1.0 dB;			
Accuracy				
RBW Switching Uncertainty	Relative to 10 kHz RBW < 0.1 dB			
Input Attenuation Switching Uncertainty	20°C to 30°C, fc=50 MHz, Preamplifier Off, 10dB RF attenuation, input signal 0 - 40 dB < 0.5 dB			
Absolute Amplitude Uncertainty	<0.4 dB (B20°C to 30°C, fc=50 MHz, peak detector, 10 dB RF attenuation, preamplifier off, input signal level = -10 dBm)			
Reference Level Uncertainty	<0.7dB (95% confidence level, S/N > 20 dB, RBW = VBW = 1 kHz, preamplifier off, attenuation = 10 dB			
VSWR	input ≥ 10 dB, 300 kHz to max;			
	<1.8, nominal			
Sweep time				
Sweep time	SPAN ≥ 100 Hz 10ms to 3000s			
	zero sweep width 33.33 μs to 3000s			
Sweep time uncertainty	SPAN≥ 100 Hz 5%(nominal)			
	zero sweep(Sweep time > 1 ms) 5%(nominal)			
Mode	Continue, single			
Triggering				
Trigger	Free run, video, external			
External trigger level	5 V TTL level			
Tracking generator (optional)				
Output frequency range	100kHz - 1.5GHz	100kHz - 3.2GHz	100kHz - 3.6GHz	100kHz - 7.5GHz
Output power level range	-40 dBm to 0 dBm			
Output power level resolution	1dB			
Output flatness	±3dB			
Tracking generator spurious	Harmonic spurious -20 dBc (Tracking generator output power -10 dBm)			
	Non-harmonic spurious -20 dBc (Tracking generator output power -10 dBm)			

Tracking source to input terminal isolation	-60 dB (Tracking generator output power 0 dBm)
Inputs and Outputs	USB HOST, USB DEVICE, LAN, earphone port, HDMI, External Trigger Input
General technical specification	
Display	10.4 inches TFT Touch LCD
Weight (without package)	About 5 kg
Dimension (W × H × D)	375mm*185mm*120mm

PRODUCT ACCESSORIES

The accessories subject to final delivery.



Power Cord



USB Cable



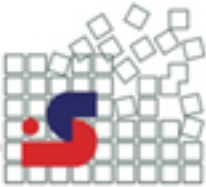
Quick Guide



CD Rom



شرکت صائن
WWW.SAENCO.COM
021 88936611



Optional Accessories



Near Field Probe includes:
Four near-field probes, N-SMA adapter, SMA-SMA cable,
(Frequency range: 30MHz - 3GHz)



N-N Cable



N-SMA Cable



SMA-SMA Cable



SMA Adaptor



N-SMA Adaptor