RIGOL

RSA800 Series

Real-Time Spectrum Analyzer

Data Sheet
DSD36100-1110
2026.06

Product Features

- Six working modes: GPSA, RTSA, VSA, EMI, ADM and PNOISE
- Frequency range: 5 kHz to 14 GHz
- Excellent DANL (Displayed Average Noise Level)
- Good phase noise performance
- High-precision amplitude measurement error
- Multiple analysis bandwidth options
- Excellent SFDR
- Powerful real-time spectrum analysis function
- Display different types of measurement values in multi-pane windowing form
- Built-in tracking generator output
- Appearance and Dimensions: 265.35 mm (W) × 161.75 mm (H) × 77.38 mm (D)
- Interfaces: USB, LAN, and HDMI
- Power supply: Type-C adapter; supports power bank
- Support standard SCPI instruction sets

RSA800 Series Real-Time Spectrum Analyzer is a real-time spectrum analyzer product launched by RIGOL. It features excellent test dynamic range, phase noise, amplitude accuracy, and test speed, and supports functions including spectrum analysis, real-time spectrum analysis, vector signal analysis, and phase noise analysis, meeting diverse signal testing and analysis requirements.

The RSA800 series products offer robust system expansion capabilities, enabling test system integration and secondary development through various digital and analog output interfaces. With a compact and portable form factor, the instrument is suitable for laboratory, educational, and field testing environments, and supports power bank supply for mobile testing applications.

With its stable performance and flexible application modes, the RSA800 series can be widely used in R&D, production, and maintenance testing across fields such as wireless communications, automotive electronics, and the Internet of Things (IoT).

RSA800 Series Technical Specifications

Six working modes: GPSA, RTSA, VSA, EMI, ADM and PNOISE

Model	RSA804	RSA808	RSA814
Frequency Range	5 kHz to 4.5 GHz	5 kHz to 8.5 GHz	5 kHz to 14 GHz
Amplitude Range	DANL to +20 dBm		
1 GHz Phase Noise	10 kHz offset, <-110 dBc/Hz, -112 dBc/Hz (typ.)		
1 GHz DANL normalized to 1 Hz	-145 dBm (typ.) with PA off -168 dBm (typ.) with PA on		
RBW	1 Hz to 10 MHz		
VBW	1 Hz to 10 MHz		
Third-order Intercept (TOI) 1GHz	+20 dBm (typ.)		
Max. Analysis Bandwidth	40 MHz		
Max. Real-Time Bandwidth	40 MHz		
Measurement Functions	GPSA, RTSA, VSA, EMI, ADM, PNOISE		
Tracking Generator Output Power	- 40dBm to +0dBm		
Appearance and Dimensions	265.35 mm (W) × 161.75 mm (H) × 77.38 mm (D)		
I/O	LAN, USB, HDMI		
Screen	7-inch 1024×600 HD touch display		
Programming Control Instruction Sets	Support standard SCPI instruction sets		

Specifications

- **Specifications are valid under the following conditions:** the instrument is within the calibration period; stored for at least two hours at 0°C to 40°C temperature; 40-minute warm-up. Unless otherwise noted, the specifications in the manual include the measurement uncertainty.
- **Typical (typ.):** typical performance, which 80 percent of the measurement results will meet at room temperature (approximately 25°C). The data are not warranted and do not include the measurement uncertainty.
- **Nominal (nom.):** the expected mean or average performance or a designed attribute (such as the 50 Ω connector). The data are not warranted and are measured at room temperature (approximately 25°C).
- **Measured (meas.):** an attribute measured during the design phase and can be compared with the expected performance, e.g. the amplitude drift varies with time. The data are not warranted and are measured at room temperature (approximately 25°C).

Note:
All charts in this manual are the measurement results of multiple instruments at room temperature unless otherwise noted. All the specifications (except tracking generator specifications) listed in this manual are obtained with tracking generator off.

Measurement Mode and Product Model Adaptation Table

	RSA804	RSA808	RSA814
GPSA	√	√	√
RTSA	√	√	√
VSA	○	○	○
EMI	○	○	○
ADM	○	○	○
PNOISE	○	○	○

NOTE: √ indicates standard configuration; ○ indicates optional configuration.

All Measurement Modes

Model	RSA804	RSA808	RSA814
Frequency Range	5 kHz to 4.5 GHz	5 kHz to 8.5 GHz	5 kHz to 14 GHz
Internal Reference Frequency			
Reference Frequency	10 MHz		
Accuracy	±[(time since last calibration × aging rate) + temperature stability + calibration accuracy]		
Initial Calibration Accuracy	1 ppm		
Temperature Stability	0°C to 40°C, with the reference 25°C		
	<0.5 ppm		
Aging Rate	<0.5 ppm/year		

GPSA Mode

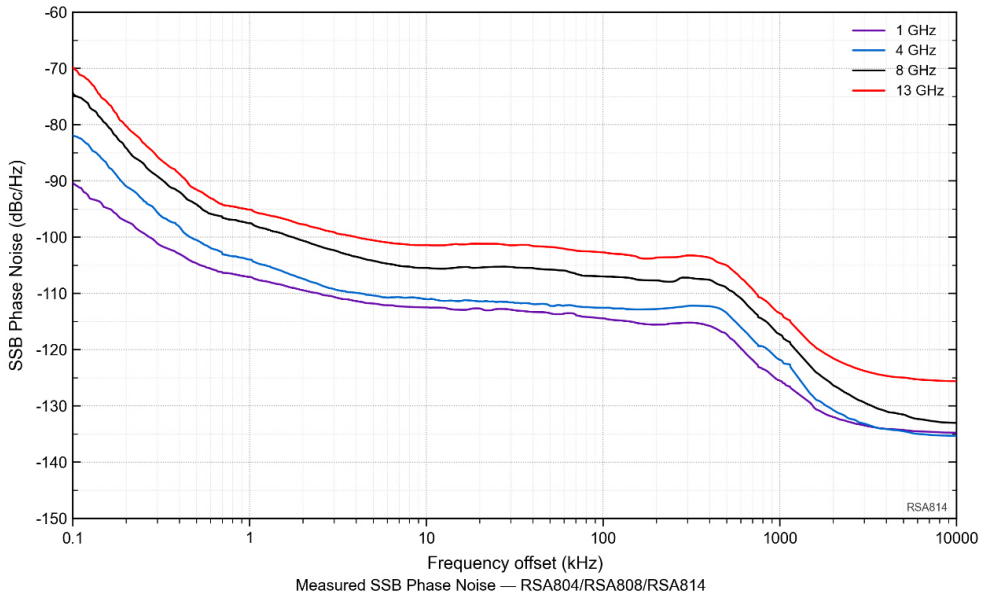
Frequency

Frequency Readout Accuracy	
Marker Frequency Resolution	span/(number of sweep points - 1)
Marker Frequency Uncertainty	±(marker frequency readout × reference frequency accuracy + 1% × span + 10% × resolution bandwidth + marker frequency resolution)

Frequency counter (RBW = 1 kHz, Freq = 1 GHz)	
Resolution	1 Hz (Max.)
Uncertainty	±(marker frequency readout × reference frequency accuracy + counter resolution)

Frequency Span	
Range	0 Hz, 10 Hz to maximum frequency
Resolution	2 Hz
Uncertainty	±[0.1% x span + span/(number of sweep points - 1)]

SSB Phase Noise		
20°C to 30°C, fc = 1 GHz, sample detector		
Carrier Offset	1 kHz	<-100 dBc/Hz, <-102 dBc/Hz (typ.)
	10 kHz	<-110 dBc/Hz, <-112 dBc/Hz (typ.)
	1 MHz	<-120 dBc/Hz, <-122 dBc/Hz (typ.)
	10 MHz	<-130 dBc/Hz (typ.)



SSB Phase Noise

Residual FM	
20°C to 30°C, RBW = VBW = 1 kHz	
Residual FM	<10 Hz (nom.)

Bandwidth	
Set "Sweep Type" to "Accurate"	
Resolution Bandwidth (-3 dB)	1 Hz to 10 MHz, in 1-3-10 sequence
RBW Accuracy	10 MHz, <10%
	1 Hz to 3 MHz, <3%
Resolution filter shape factor (60 dB:3 dB) [1]	≤5 (nom.)
Video Bandwidth (-3 dB)	1 Hz to 10 MHz, in 1-3-10 sequence
Resolution Bandwidth (-6 dB)	200 Hz, 9 kHz, 120 kHz, 1 MHz

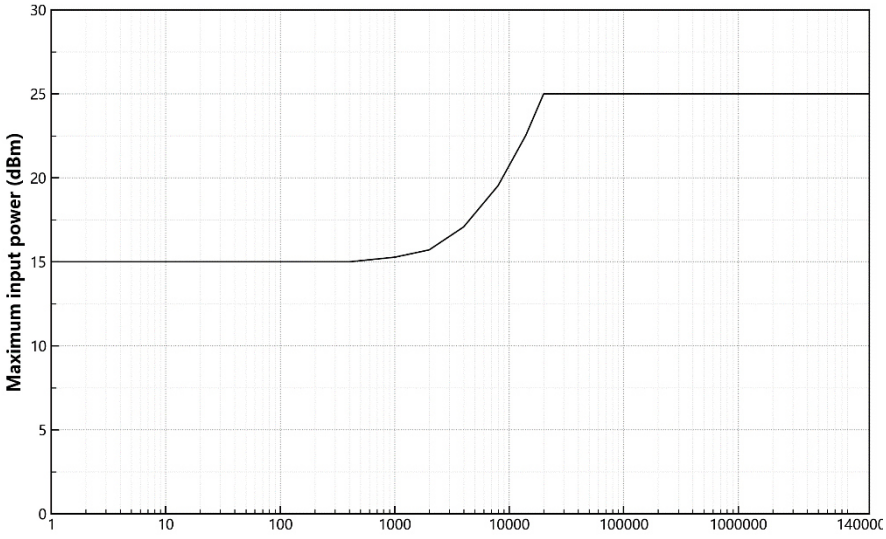
Amplitude

Measurement Range	
Range	fc ≥10 MHz
	Displayed Average Noise Level (DANL) to +20 dBm

Maximum Safe Input Level [2]	
DC Voltage	35 V
CW RF Power	+20 dBm, attenuator = 30 dB, PA off
	-10 dBm, attenuator = 30 dB, PA on

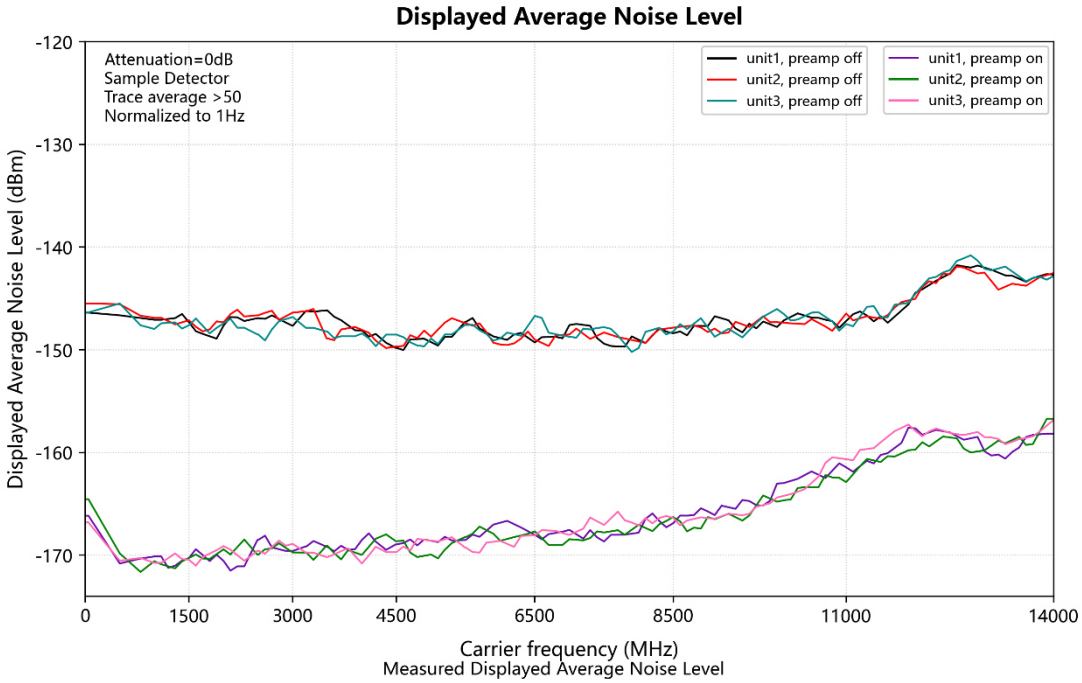
Maximum Damage Level	
CW RF Power	+25 dBm

Note:
[1]: For RBW > 100 kHz, direct measurement of filter characteristics near -60 dB is not feasible due to SNR constraints.
[2]: When fc < 20 MHz, the maximum safe input level is reduced.



Maximum Damage Level

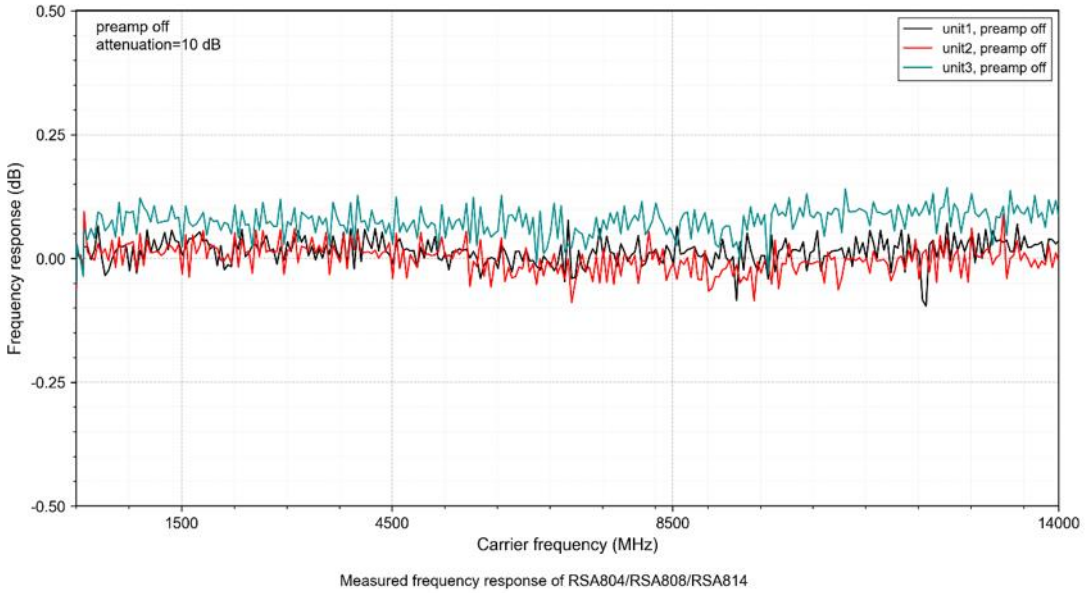
Displayed Average Noise Level (DANL)		
Attenuation = 0 dB, sample detector, trace averages ≥ 50, tracking generator off, normalized to 1 Hz, 20°C to 30°C, input impedance = 50 Ω.		
PA Off	5 kHz < f ≤ 100 kHz	<-120 dBm (typ.)
	100 kHz < f ≤ 4.5 GHz	<-140 dBm, <-143 dBm (typ.)
	4.5 GHz < f ≤ 8.5 GHz	<-142 dBm, <-145 dBm (typ.)
	8.5 GHz < f ≤ 11 GHz	<-140 dBm, <-143 dBm (typ.)
	11 GHz < f ≤ 14 GHz	<-135 dBm, <-138 dBm (typ.)
PA On	1 MHz < f ≤ 100 MHz	<-155 dBm, <-158 dBm (typ.)
	100 MHz < f ≤ 4.5 GHz	<-165 dBm, <-168 dBm (typ.)
	4.5 GHz < f ≤ 8.5 GHz	<-162 dBm, <-165 dBm (typ.)
	8.5 GHz < f ≤ 11 GHz	<-155 dBm, <-158 dBm (typ.)
	11 GHz < f ≤ 14 GHz	<-150 dBm, <-153 dBm (typ.)



DANL

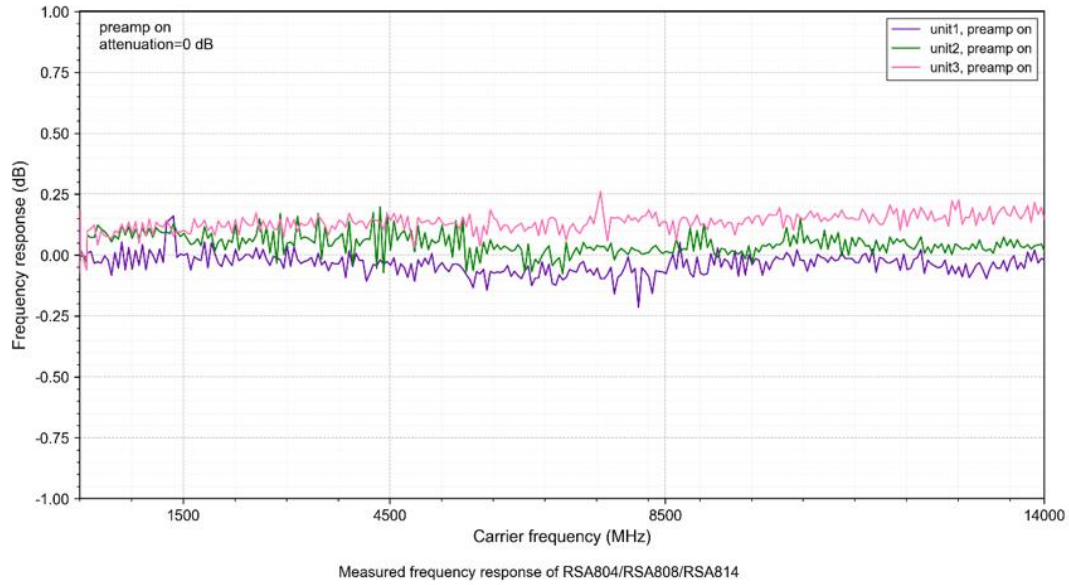
Level Display	
Logarithmic Scale	1 dB to 200 dB
Linear Scale	0 to reference level
Number of display points	801
Number of traces	6
Detector Type	Normal, pos-peak, neg-peak, sample, RMS average, voltage average, Quasi-peak, EMI CISPR RMS average
Trace Type	Clear write, max hold, min hold, average, view, blank
Scale Unit	dBm, dBmV, dBuV, nV, uV, mV, V, pW, nW, uW, mW, W, mA, uA, A

Frequency Response		
PA Off	attenuation = 10 dB, relative to 50 MHz, 20°C to 30°C	
	9 kHz < f ≤ 100 kHz	<0.3 dB (typ.)
	100 kHz < f ≤ 4.5 GHz	<0.5 dB, <0.3 dB (typ.)
	4.5 GHz < f ≤ 8.5 GHz	<0.7 dB, <0.5 dB (typ.)
	8.5 GHz < f ≤ 14 GHz	<0.9 dB, <0.7 dB (typ.)



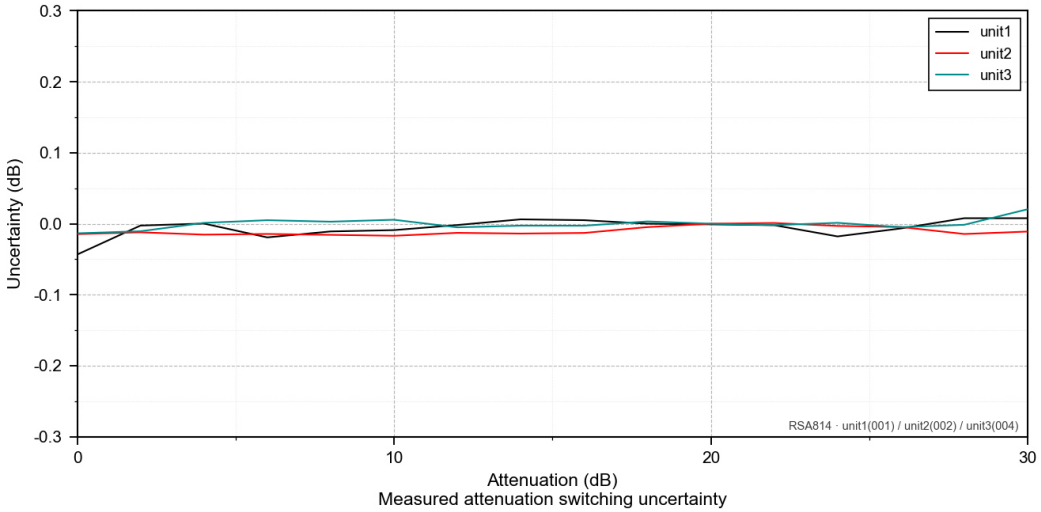
Frequency Response (attenuation = 10 dB, PA off)

Frequency Response		
PA On	attenuation = 0 dB, relative to 50 MHz, 20°C to 30°C	
	100 kHz < f ≤ 4.5 GHz	<0.7 dB, <0.5 dB (typ.)
	4.5 GHz < f ≤ 8.5 GHz	<0.9 dB, <0.7 dB (typ.)
	8.5 GHz < f ≤ 14 GHz	<1.1 dB, <0.9 dB (typ.)



Frequency Response (attenuation = 0 dB, PA on)

Input Attenuation Switching Uncertainty	
Setting Range	0 dB to 30 dB, step 2 dB
Switching Uncertainty	fc = 50 MHz, relative to 10 dB attenuation, PA off, 20°C to 30°C
	<0.3 dB



Switching Uncertainty

Absolute Amplitude Accuracy	
Uncertainty	fc = 50 MHz, peak detector, PA off, 10 dB attenuation, input level -10 dBm, 20°C to 30°C
	<0.3 dB

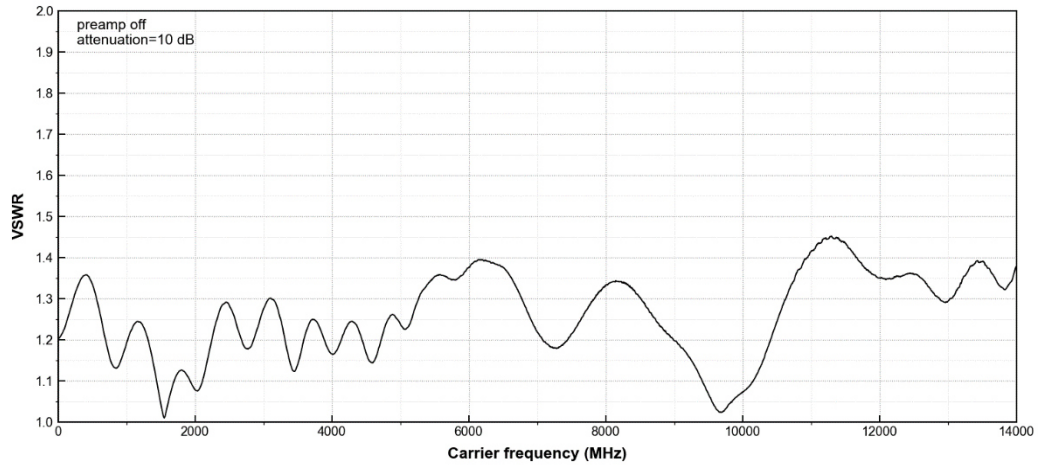
Reference Level		
Range	Logarithmic Scale	-170 dBm to +20 dBm, step 0.01 dB
	Linear Scale	707 pV to 2.24 V, 0.11% (0.01 dB) resolution

RBW Switching		
Uncertainty	Set "Sweep Type" to "Accurate", relative to 30 kHz RBW	
	1 Hz to 1 MHz	<0.1 dB
	3 MHz, 10 MHz	<0.3 dB

Preamplifier			
	RSA804	RSA808	RSA814
Frequency Range	1 MHz to 4.5 GHz	1 MHz to 8.5 GHz	1 MHz to 14 GHz
Gain	25 dB (nom.)		

Level Measurement Uncertainty		
95% confidence, S/N > 20 dB, RBW and VBW both 1 kHz, PA off, 10 dB attenuation, -50 dBm < input level ≤ 0 dBm, fc > 10 MHz, 20°C to 30°C		
Level Measurement Uncertainty	10 MHz < f ≤4.5 GHz	< 0.8 dB (nom.)
	4.5 GHz < f ≤8.5 GHz	< 1.0 dB (nom.)
	8.5 GHz < f ≤14 GHz	< 1.8 dB (nom.)

RF Input VSWR		
Attenuation ≥ 10 dB, preamp off		
VSWR	10 MHz≤ f ≤ 4.5 GHz	<1.5 (nom.)
	4.5 GHz ≤ f ≤ 8.5 GHz	<1.7 (nom.)
	8.5 GHz ≤ f ≤ 14 GHz	<1.9 (nom.)



VSWR

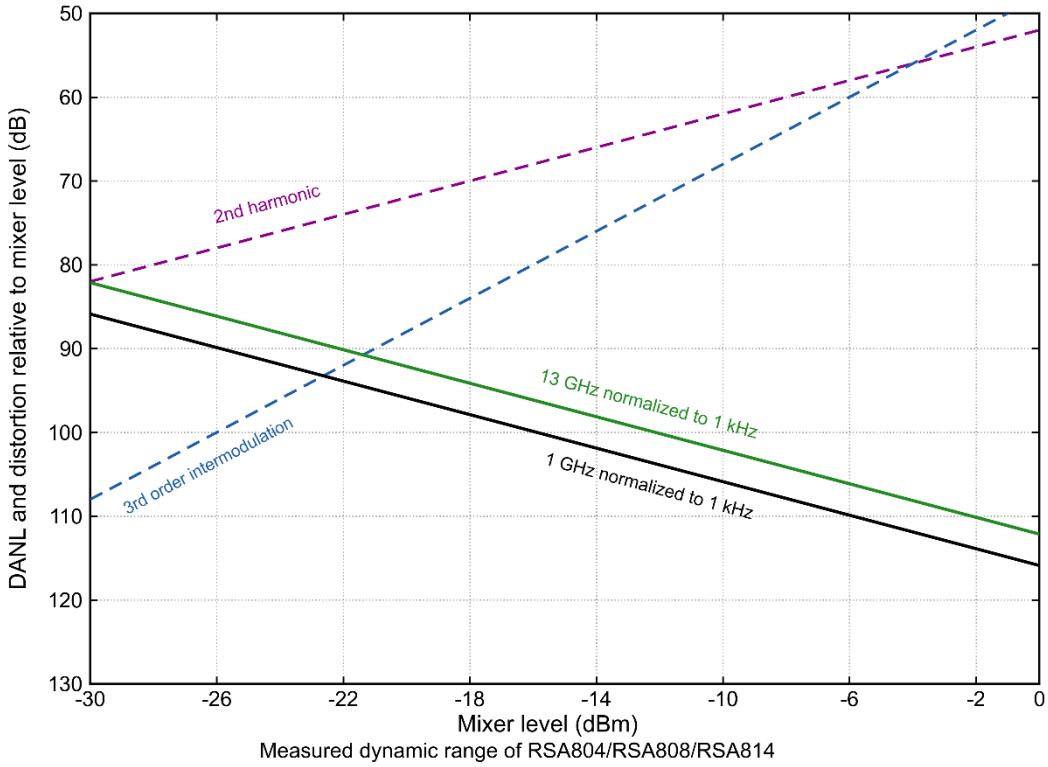
Distortion

Second Harmonic Intercept				
		RSA804	RSA808	RSA814
Second Harmonic Intercept (SHI)	Input signal level: -20 dBm, attenuator: 0 dB, PA off			
	10 MHz ≤ f ≤ 2.25 GHz	+45 dBm	+45 dBm	+45 dBm
	2.25 GHz < f ≤ 4.25 GHz		+45 dBm	+45 dBm
	4.25 GHz < f ≤ 7 GHz			+30 dBm

Third-order Intercept				
		RSA804	RSA808	RSA814
Third-order Intercept (TOI)	Input a two-tone signal with a frequency spacing of 200 kHz, attenuator:-20 dBm., 0 dB attenuation, PA off			
	10 MHz ≤ f ≤ 4.5 GHz	+18 dBm, +20 dBm (typ.)	+18 dBm, +20 dBm (typ.)	+18 dBm, +20 dBm (typ.)
	4.5GHz ≤ f ≤ 8.5 GHz		+14 dBm, +16 dBm (typ.)	+14 dBm, +16 dBm (typ.)
	8.5GHz ≤ f ≤ 14 GHz			+12 dBm, +14dBm (typ.)

P1 dB	
1 dB gain compression (P1 dB) [1] Dual-tone Test	fc ≥ 50 MHz, 0 dB attenuation, PA off
	0 dBm (nom.)

Note:
[1]: The frequency interval of the two-tone signals should be greater than 20 MHz.



Distortion

Spurious Response	
Residual Response[1]	50 Ω termination at input, 0 dB attenuation, 20°C to 30°C
	<-100 dBm (typ.)
Intermediate Frequency	<-100 dBc (typ.)
System-related Sideband	Carrier offset = 1 kHz
	<-60 dBc (typ.)
Input-related Spurious	mixer level -30 dBm
	<-90 dBc (typ.)
Image spurious	mixer level -10 dBm
	<-90 dBc (typ.)

Note:
[1]: Excluding the internal 100 MHz system clock and its harmonics.

Sweep

Sweep		
Sweep Time	Span ≥ 10 Hz	1 ms to 4,000 s
	zero span	1 µs to 6,000 s
Sweep Time Uncertainty	Span ≥ 10 Hz, RBW ≥ 1 kHz	5% (nom.)
	zero span (sweep time > 1ms)	5% (nom.)
Sweep Mode	Continuous, single	
Sweep Points	EMI mode: 101 to 100,001, default 801 Other modes: 101 to 100,001, default 801	

Trigger

Trigger		
Trigger Source	Free run, external trigger, video	
Trigger Delay	Span ≥ 10 Hz	0 ms to 500 ms
	zero span	-150 ms to 500 ms
Trigger Delay Resolution	0.1 µs	

Tracking Generator

TG Output [1]			
	RSA804	**RSA808**	**RSA814**
Frequency Range	100 kHz to 4.5GHz	100 kHz to 8.5GHz	100 kHz to 14GHz
Output Level Range	-40 dBm to 0 dBm		
Output Level Resolution	1 dB		
Output Flatness	Relative to 50 MHz		
	±3 dB (nom.)		

RTSA Application

RTSA			
Real-Time Bandwidth (Max.)	5 kHz ≤ f ≤ 100 MHz		20 MHz
	100 MHz < f ≤ 14 GHz		40 MHz
Min. Signal Duration for 100% POI at the Full-Scale Accuracy	maximum span; default Kaiser Window		
	5.62 µs		
Detector Type	Pos-peak, neg-peak, sample, voltage average		
Number of Traces	6		
Window Type	Hanning, Blackman-Harris, Rectangular, Flattop, Kaiser, and Gaussian		
RBW	Provides 6 RBWs for each window, except the Rectangular; Span		
	Span	Min. bandwidth	Max. bandwidth
	40 MHz	100.46 kHz	3.21 MHz
	20 MHz	50.22 kHz	1.607 MHz
Max. Sample Rate	51.15 Msa/s		
FFT Rate	199804 frames/s		
Number of Markers	8		
Amplitude Resolution	0.01 dB		
Frequency Point	801		
Acquisition Time	Max. Sample Rate		
	≥100 µs		

Min. signal duration for 100% POI at different RBWs, with the unit µs						
Span	RBW1	RBW2	RBW3	RBW4	RBW5	RBW6
40 MHz	25.005	14.996	9.991	7.488	6.237	5.620
20 MHz	45.005	24.985	14.976	9.971	7.469	6.217
10 MHz	85.005	44.966	24.946	14.936	9.932	7.429
1 MHz	812.513	412.122	211.926	111.828	61.780	36.755

Amplitude	
Amplitude Flatness	40 MHz BW, Only applicable to the Normal measurement.
	±0.5 dB (nom.)
SFDR	<-60 dBc (typ.)

Density	
0 to 100% (with a step of 0.1%)	Min. Span
Min. Span	5 kHz
32 ms to 10 s	Maximum Acquisition Volume

Spectrogram	
Maximum Acquisition Volume	10000
Dynamic Range Covered with Color	200 dB

PVT	
Min. Capture Time	100 µs
Max. Capture Time	40 s

Trigger	
Trigger Source	Free run, external, IF power (time), FMT
FMT	
Trigger Diagram	density, spectrogram, normal
Trigger Resolution	0.5 dB
Trigger Condition	Enter, Leave, Inside, Outside, Enter-Leave, Leave-Enter

VSA Application

VSA		
Analysis Bandwidth (Max.)	5 kHz ≤ f ≤ 100 MHz	20 MHz
	100 MHz < f ≤ 14 GHz	40 MHz
Capture Oversampling	4, 8, 16	
Capture Length	Max. 4,096	
Max. Sample Rate	51.15 MSa/s	
Symbol Rate	Related to Capture Oversampling	
	Sample Rate/Capture Oversampling, ≥1 kHz	
Available I/Q Bandwidth	Symbol Rate x Capture Oversampling/1.28	
Trig Mode	Free run, external, IF power (time)	
Modulation Format		
FSK	2FSK, 4FSK, 8FSK	
MSK	Enables or disables the differential encoding for MSK	
PSK	BPSK, QPSK, OQPSK, DQPSK, pi/4-DQPSK, 8PSK, D8PSK, pi/8- D8PSK	
QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM	
ASK	2ASK, 4ASK	
APSK	16APSK，32APSK	
Filter Type		
Measurement Filter Type	No Filter, RRC, Gaussian, Rectangular, user-defined	
Reference Filter Type	Raised Cosine, RRC, Gaussian, Rectangular, Half Sine, user-defined	
Preset Standard		
Cellular	GSM, NADC, WCDMA, PDC, PHP(PHS)	
Wireless Networking	Bluetooth, WLAN(802.11b) , ZIGBEE 868M, ZIGBEE 915M. ZIGBEE 2450M	
Others	TETRA, DECT, APCO-25	
Measurement Uncertainty		
Applicable Conditions	Temperature at +20°C to +30°C Signal level ≥ -25 dBm Select the proper amplitude range Deviation between the instrument's center frequency and the signal's center frequency less than 5% of symbol rate Random data sequence Capture oversampling 4	

Residual Error for QPSK		
Test Signal		The reference filter is RC, measurement filter RRC, with rolloff factor 0.35. The result lengths are 150 symbols. The center frequency is 1 GHz, and the capture oversampling is 4.
Residual EVM RMS		
Symbol Rate	100 ksps	<0.8% (nom.)
	1 Msps	<1.0% (nom.)
	10 Msps	<1.2% (nom.)

Residual Error for FSK		
Test Signal		The reference filter is RC, measurement filter RRC, with rolloff factor 0.35. The FSK frequency deviation is a quarter of the symbol rate. The result lengths are 150 symbols. The center frequency is 1 GHz, and the capture oversampling is 4.
FSK Error		
Symbol Rate	10 Msps	< 1.5% (nom.)

EMI Application

EMI Resolution Bandwidth	
Resolution Bandwidth (-3 dB)	100 Hz to 10 MHz, in 1-3-10 sequence
Resolution Bandwidth (-6 dB)	200 Hz, 9 kHz, 120 kHz, 1 MHz

EMI Detector	
Detector	Pos-peak, neg-peak, average, quasi-peak, EMI average, and RMS average

EMI Key Features	
Key Features	CISPR 16-1-1 detectors CISPR 16-1-1 bandwidths log and linear display signal list scan table simultaneous detectors automatic limit testing measure at marker delta to limit report generation

ADM Application

ADM Resolution Bandwidth		
Analysis Bandwidth (Max.)	5 kHz ≤ f ≤ 100 MHz	20 MHz
	100 MHz < f ≤ 14 GHz	40 MHz

General Specifications			
	RSA804	RSA808	RSA814
Carrier Power	-30 dBm to 20 dBm		
Carrier Power Accuracy	±1.8 dB (nom.)		

Amplitude Modulation (AM)		
Modulation Rate		20 Hz to 100 kHz
Modulation Rate Accuracy	Modulation Rate < 1 kHz	1 Hz (nom.)
	Modulation Rate ≥ 1 kHz	<0.1% of the Modulation Rate (nom.)
Modulation Depth		5% to 95%
Modulation Depth Accuracy		±4% (nom.)

Frequency Modulation (FM)		
Modulation Rate [1]		20 Hz to 200 kHz
Modulation Rate Accuracy	Modulation Rate < 1 kHz	1 Hz (nom.)
	Modulation Rate ≥ 1 kHz	<0.1% of the Modulation Rate (nom.)
Freq Deviation		20 Hz to 400 kHz
FM Deviation Accuracy [1]		±4% (nom.)

Phase Modulation (PM)		
Modulation Rate		50 Hz to 50 kHz
Modulation Rate Accuracy	Modulation Rate < 1 kHz	1 Hz (nom.)
	Modulation Rate ≥ 1 kHz	<0.1% of the Modulation Rate (nom.)
PM Deviation		0.2 rad to 100 rad
PM Deviation Accuracy		±4% (nom.)

Note:
[1]: Modulation Index = Modulation Frequency Deviation/Modulation Rate. The range of the modulation index is from 0.2 to 1,000.

General Specifications

Display		
Type	capacitive multi-touch screen	
Resolution	1024 × 600	
Dimensions	7 inch	
Color	24-bit color	

Mass Memory		
Mass Memory	Internal Storage	32 GB
	External Storage	USB storage device (not supplied)

Power		
Power Interface	Type-C	
Supply Voltage	DC 20 V, 5A	
Power Consumption	50 W (typ.)	

Environment		
Temperature	Operating Temperature Range	0°C to 40°C
	Storage Temperature Range	-20°C to 60°C
Humidity	Operating	0 °C to 30 °C:≤ 95% RH 30°C to 40°C: ≤75% RH
	Non-operating	<+40°C: 5% to 90%RH, without condensation ≥+40°C to <+60°C: 5% to 80%RH, without condensation
Altitude	Operating Height	Below 2,000 m (6561.68 feet)

Electromagnetic Compatibility and Safety		
Electromagnetic Compatibility (EMC)	Anti-interference conforms to specifications in EMC Directive 2014/30/EU;	
	EMC RF and emission limits conforms to CISPR11/EN 55011, Group 1, Class A	
	IEC61000-4-2:2008/EN61000-4-2	±4.0 kV (contact discharge), ±8.0 kV (air discharge)
	IEC61000-4-3:2002/EN61000-4-3	3 V/m (80 MHz to 1 GHz); 3 V/m (1.4 GHz to 2 GHz);

Electromagnetic Compatibility and Safety		
		1 V/m (2.0 GHz to 2.7 GHz)
	IEC61000-4-4:2004/EN61000-4-4	1 kV power line
	IEC61000-4-5:2001/EN61000-4-5	0.5 kV (phase-to-neutral voltage); 1 kV (phase-to-earth voltage); 1 kV (neutral-to-earth voltage)
	IEC61000-4-6:2003/EN61000-4-6	3 V, 0.15 MHz-80 MHz
	IEC61000-4-11:2004/EN 61000-4-11	Voltage dip: 0% UT during half cycle 0% UT during 1 cycle 70% UT during 25 cycles Short interruption: 0% UT during 250 cycles
Safety	EN 61010-1, IEC 61010-1, UL 61010-1, CAN/CSA-C22.2 no. 61010-1	
Environment	Samples of this product have been type tested in accordance with RIGOL's reliability test regulations and verified to be robust against the environmental stresses of storage, transportation, and end-use; those stresses include, but are not limited to, temperature, humidity, shock, and vibration.The test methods are compliant with standards specified in GB/T65872 Class 2 and MIL PRF-28800F Class 3.	

Appearance and Dimensions	
Dimensions (W × H × D)	265.35 mm × 161.75 mm × 77.38 mm
Weight	1.9 kg

Calibration Interval	
Recommended Calibration Interval	18 months

Input / Output

Front Panel Connector		
RF Input	Impedance	50 Ω (nom.)
	Connector	N-type female
Tracking Generator Output	Impedance	50 Ω (nom.)
	Connector	N-type female

Internal/External Reference		
Internal Reference	Frequency	10 MHz
	Output Level	+3 dBm to +10 dBm, +7 dBm (typ.)
	Impedance	50 Ω (nom.)
	Connector	BNC female
External Reference	Frequency	10 MHz ± 10 ppm
	Input Level	0 dBm to +10 dBm
	Impedance	50 Ω (nom.)
	Connector	BNC female

External Trigger Input/Output		
Trig Input	Impedance	≥ 1 kΩ (nom.)
	Connector	BNC female
	Level	3.3 V TTL Level
Trig Output	Impedance	50 Ω (nom.)
	Connector	BNC female
	Level	3.3 V TTL Level

Communication Interface		
USB Host	Connector	USB Type-A (Standard)
	Protocol	Version 2.0
USB Device	Connector	USB Type-B (Standard)
	Protocol	Version 2.0
LAN	Connector	100/1000 Base-T, RJ-45
	Protocol	LXI Core 2011 Device
HDMI	Connector	A plug
	Protocol	HDMI 1.4

Ordering Information and Warranty

Ordering Information

	Description	Order No.
Model	Real-time spectrum analyzer, 5 kHz to 4.5 GHz	RSA804
	Real-time spectrum analyzer, 5 kHz to 8.5 GHz	RSA808
	Real-time spectrum analyzer, 5 kHz to 14 GHz	RSA814
Standard Accessory	Power adapter compliant with local standards	-
Options	Vector Signal Analysis Application Software	RSA800-VSA
	EMI Measurement Application Software	RSA800-EMI
	Analog Demodulation Application Software	RSA800-ADM
	Advanced Measurement Kit	RSA800-AMK
	Phase Noise Measurement Application Software	RSA800-PNOISE
Optional Accessories	DSA utility kit. Refer to Note[1] for details.	DSA Utility Kit
	RF adaptor kit. Refer to Note[2] for details.	RF Adaptor Kit
	Includes: 50 Ω to 75 Ω adaptor (2pcs)	RF CATV Kit
	Includes: 6 dB attenuator (1pcs), 10 dB attenuator (2pcs)	RF Attenuator Kit
	30 dB high-power attenuator, with the max. power of 100 W	ATT03301H
	Near-field Probe	NFP-3
	USB Cable x1	CB-USBA-USBB-FF-150
	RF Cable	Refer to RF-Cable Datasheet

Note:

For all the mainframes, accessories, and options, please contact the local office of RIGOL .

[1]: Includes N-SMA cable, BNC-BNC cable, N-BNC adaptor, N-SMA adaptor, 75 Ω-50 Ω adaptor, 800 MHz/1.8 GHz antenna (2pcs), 2.4 GHz antenna (2pcs)

[2]: Includes: N(F)-N(F) adaptor (1pcs), N(M)-N(M) adaptor (1pcs), N(M)-SMA(F) adaptor (2pcs), N(M)-BNC(F) adaptor (2pcs), SMA(F)-SMA(F) adaptor (1pcs), SMA(M)-SMA(M) adaptor (1pcs), BNC T type adaptor (1pcs), 50 Ω SMA load (1pcs), 50 Ω BNC impedance adaptor (1pcs)

Warranty Period

Three-year warranty on the main unit; accessories excluded

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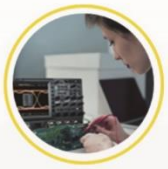

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