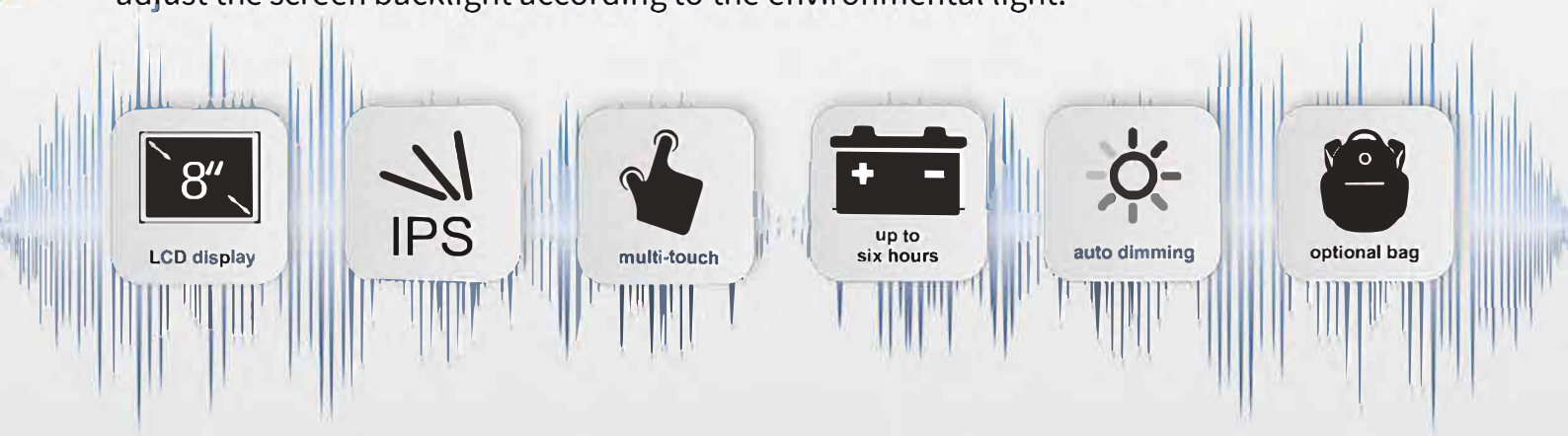
HSA1000 Series

Handheld Spectrum Analyzer

- Frequency range 9 kHz to 1.6GHz/3.6GHz
- -160 dBm DANL (Displayed Average Noise Level)
- Phase Noise < –80 dBc/Hz @1GHz at 10 kHz offset
- 10Hz Minimum Resolution Bandwidth (RBW)
- Total Amplitude Accuracy <1.5 dB
- Provide EMI pre-compliance test function, optional EMC test software
- Standard Pass/Fail on-site test alert ability
- Li-ion battery, operating life up to 4 - 6 hours, easy replacement, you can purchase extra batteries for longer test time.
- Optional 1.6GHz/3.6GHz tracking generator, 3.6GHz signal generator
- Standard GPS receiver, optional antenna, the latitude/longitude information and test information can be recorded
- 8-inch (1024*768) IPS LCD touchscreen, wider viewing angle, built-in light sensor to adjust the screen backlight according to the environmental light.



Built-in light sensor to adjust the screen backlight according to the environmental light.

8-inch (1024*768) IPS LCD screen, wider viewing angle, full touch design for more convenient operation

Preset key, resets the analyzer to a known state.

Silicone non-slip to protect the instrument

Adjustable handle strap to prevent the instrument from falling off.

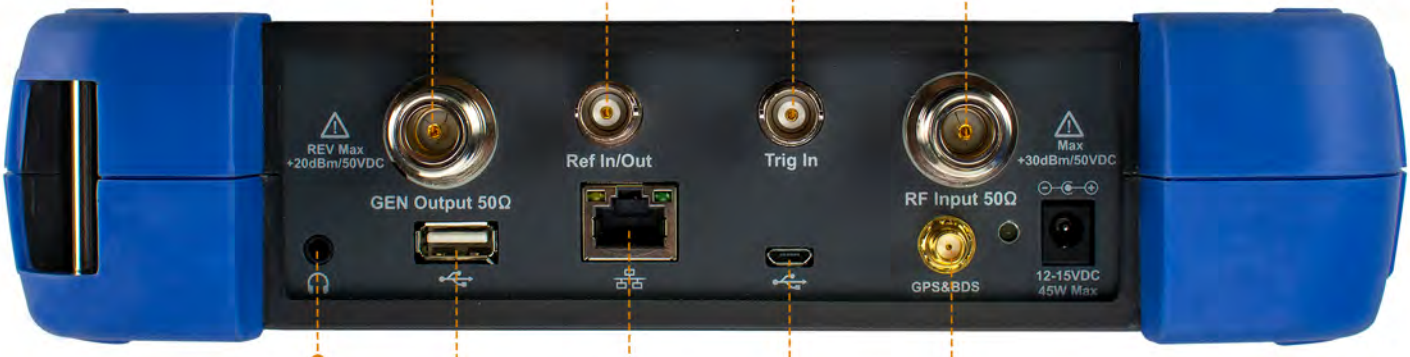
2.5 kg (with battery) for easy carrying

Reference clock IN/OUT

Full-band tracking generator output (optional)

RF Input connector

EXT Trig In connector



Headphone connector

Communication Interface

GPS/BDS antenna connector

More convenient and efficient for field testing

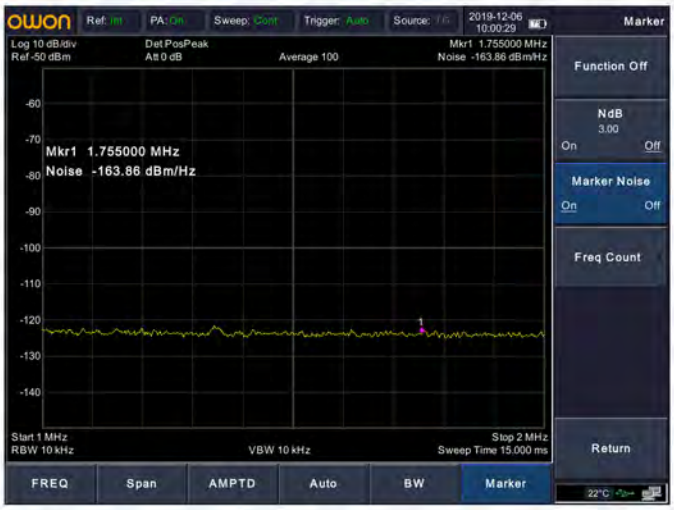
8-inch IPS LCD, wider viewing angle, built-in light sensor to adjust the screen backlight according to the environmental light, provides a superior, bright and clear trace for indoor and outdoor use. There is no need to operate in the shade.

With a carrying case, you can free your hands and make on-site work more convenient.

Excellent power management function

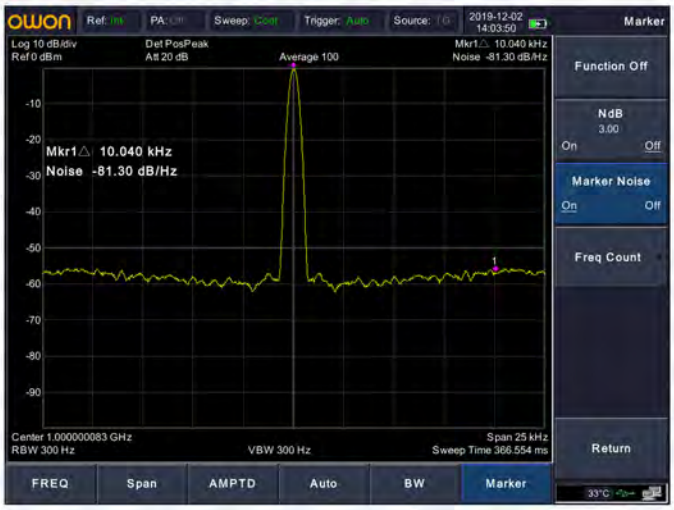
Battery operating life up to 4 - 6 hours, you can purchase extra batteries for longer test time, easy battery replacement.

Excellent small signal measurement capability



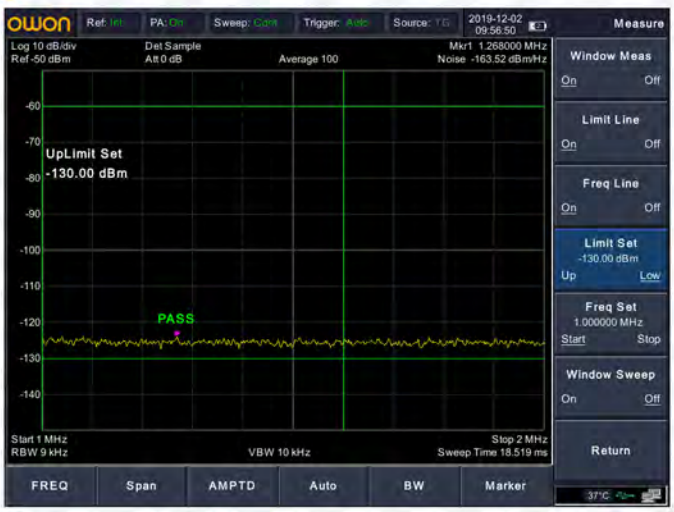
-160 dBm DANL (Displayed Average Noise Level), can observe weaker small signals

More accurate low-noise measurements



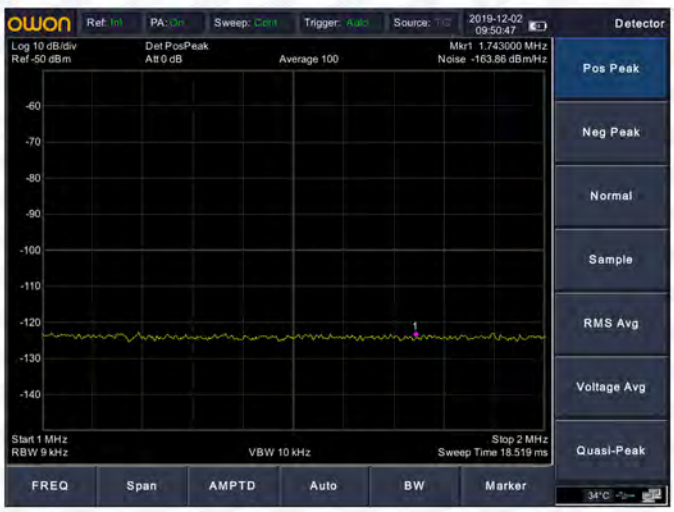
Phase Noise < −80 dBc/Hz @1GHz at 10 kHz offset

Pass/Fail function



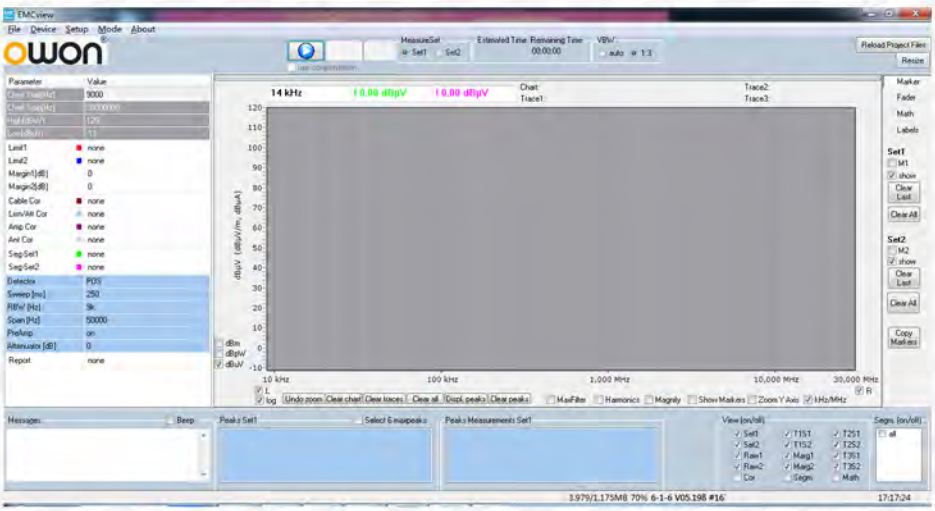
Quickly determine if the test results pass

Provides EMI pre-compliance test function



Equipped with EMI filter (6dB) and 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 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.

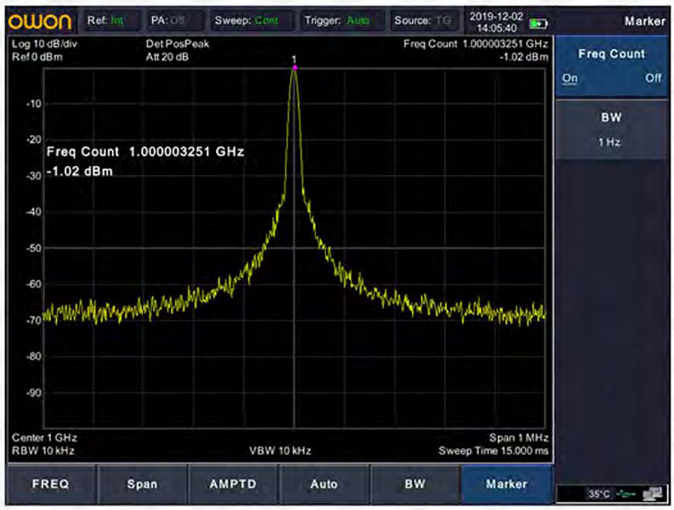
Provide multiple extended function modes

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

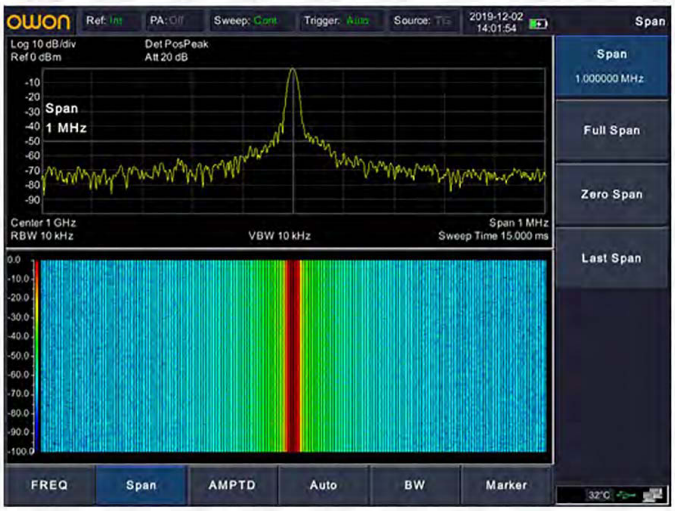
audio demodulation

channel measurement



frequency counter

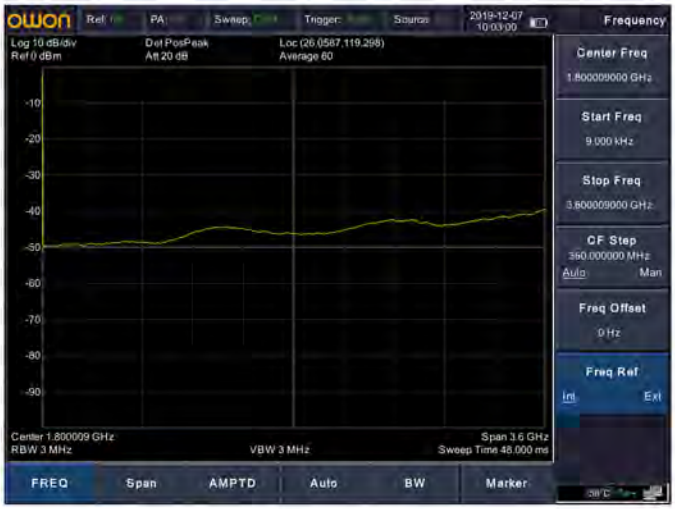
Waterfall plot graphic

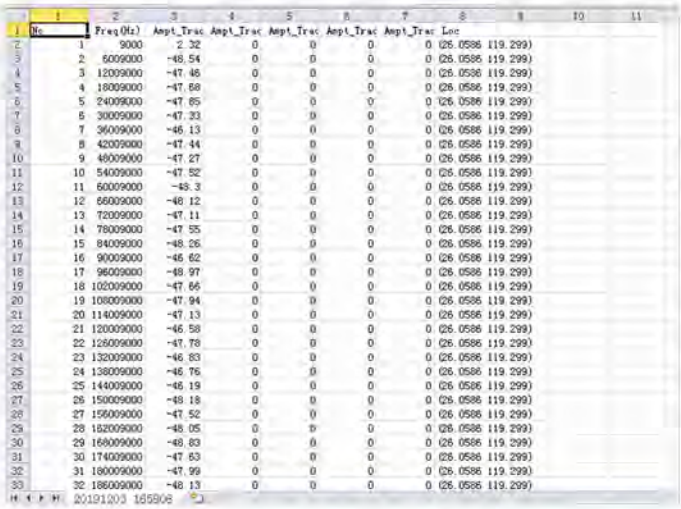


View the behavior of varying signal parameters over time, track the frequency and power behavior over the time, particularly intermittent signals. The user can use waterfall plot graphic to analyze the stability of a signal over the time, or to identify intermittent interference signals in communications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

Provide GPS positioning function

Standard GPS antenna connector, optional OWON GPS antenna, the latitude/longitude information and measurement data can be saved as CSV file.





No	Freq(Hz)	Ampt_Trac	Ampt_Trac	Ampt_Trac	Ampt_Trac	Ampt_Trac	Loc
1	9000	2.32	0	0	0	0	(26.0586 119.299)
2	6009000	-48.54	0	0	0	0	(26.0586 119.299)
3	12009000	-47.46	0	0	0	0	(26.0586 119.299)
4	18009000	-47.68	0	0	0	0	(26.0586 119.299)
5	24009000	-47.85	0	0	0	0	(26.0586 119.299)
6	30009000	-47.33	0	0	0	0	(26.0586 119.299)
7	36009000	-46.13	0	0	0	0	(26.0586 119.299)
8	42009000	-47.44	0	0	0	0	(26.0586 119.299)
9	48009000	-47.27	0	0	0	0	(26.0586 119.299)
10	54009000	-47.52	0	0	0	0	(26.0586 119.299)
11	60009000	-48.3	0	0	0	0	(26.0586 119.299)
12	66009000	-48.12	0	0	0	0	(26.0586 119.299)
13	72009000	-47.11	0	0	0	0	(26.0586 119.299)
14	78009000	-47.55	0	0	0	0	(26.0586 119.299)
15	84009000	-48.26	0	0	0	0	(26.0586 119.299)
16	90009000	-46.62	0	0	0	0	(26.0586 119.299)
17	96009000	-48.97	0	0	0	0	(26.0586 119.299)
18	102009000	-47.66	0	0	0	0	(26.0586 119.299)
19	108009000	-47.94	0	0	0	0	(26.0586 119.299)
20	114009000	-47.13	0	0	0	0	(26.0586 119.299)
21	120009000	-46.58	0	0	0	0	(26.0586 119.299)
22	126009000	-47.78	0	0	0	0	(26.0586 119.299)
23	132009000	-46.83	0	0	0	0	(26.0586 119.299)
24	138009000	-46.76	0	0	0	0	(26.0586 119.299)
25	144009000	-46.19	0	0	0	0	(26.0586 119.299)
26	150009000	-48.18	0	0	0	0	(26.0586 119.299)
27	156009000	-47.52	0	0	0	0	(26.0586 119.299)
28	162009000	-48.05	0	0	0	0	(26.0586 119.299)
29	168009000	-48.83	0	0	0	0	(26.0586 119.299)
30	174009000	-47.63	0	0	0	0	(26.0586 119.299)
31	180009000	-47.99	0	0	0	0	(26.0586 119.299)
32	186009000	-48.13	0	0	0	0	(26.0586 119.299)

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PRODUCT SPECIFICATIONS

Model	HSA1016(TG)	HSA1036(TG)
Frequency Range	9kHz - 1.6 GHz	9kHz - 3.6 GHz
Frequency Resolution	1Hz	
Aging rate	<1ppm/Year	
Phase Noise (fc=1GHz)	<-80 dBc/Hz @10 kHz offset	
Resolution Bandwidth (-3dB) (RBW)	10 Hz to 500 kHz (1-10 steps by sequence), 1 MHz, 3 MHz	
Video Bandwidth(-3dB)(VBW)	10Hz to 3MHz	
Display Average Noise Level (DANL)	(Input Attenuation= 0 dB, Sample Detector, Trace Average ≥20, 20℃ to 30℃, Input Impedance=50 Ω, RBW normalizes to 1Hz)	
1MHz-10MHz	-160dBm (Typical)	
10MHz-1GHz	-160dBm (Typical)	
1GHz-1.6GHz	-158dBm (Typical)	
1GHz-3.6GHz		-158dBm (Typical)
Detectors	Positive-peak, negative-peak, sample, normal, RMS	
Trace functions	Clear write, Max Hold, Min Hold, View, Blank, Average	
level unit	dBm,dBuW,dBpW,dBmV,dBuV, W,V	
Tracking generator (-TG Model)	100 kHz-1.6 GHz	100 kHz-3.6 GHz (Tracking generator) 35 MHz-3.6 GHz (signal generator)
Output power level range (-TG Model)	-30 dBm-0 dBm	
Output power level resolution (-TG Model)	1dB	
Communication Port	USB HOST, USB DEVICE, LAN, earphone port	
Display	8 inch touch LCD	

PRODUCT COMPARISON

1 Handheld Spectrum Analyzer 2 Metal Case 3 Quick Guide 4 CD Rom

5 Power Cord 6 Adapter 7 USB Cable 8 GPS antenna (optional)

9 Carrying Case (optional)

Device dimension: (W/H/D 265 x 190 x 58 mm)

Product specifications: The net weight is about 2.5kg, the gross weight is about 5.1kg.