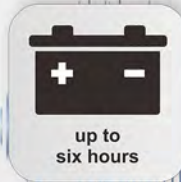




# HSA015(TG) & HSA032(TG)

## Handheld Spectrum Analyzer

- Frequency range 9 kHz to 1.5GHz/3.2GHz
- -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 1.5GHz/3.2GHz tracking generator, 3.2GHz signal generator
- 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.

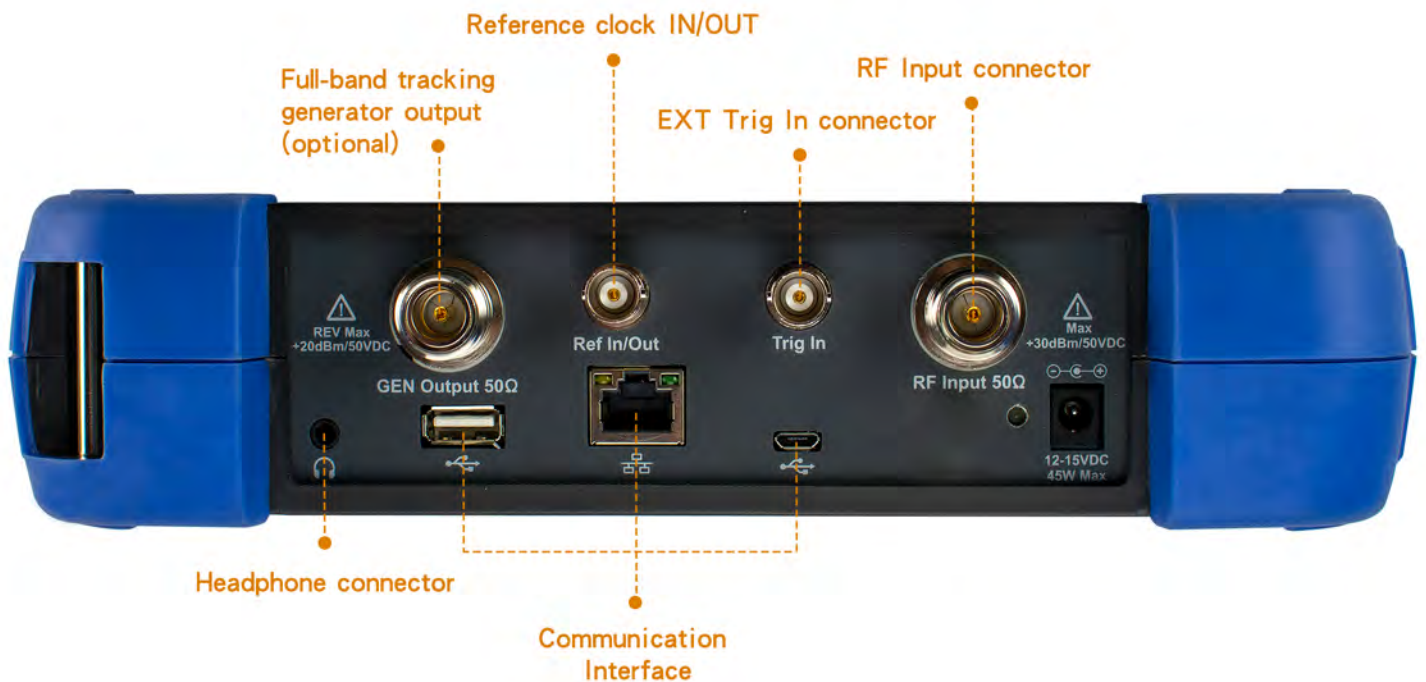
8-inch (1024\*768) IPS LCD screen, wider viewing angle, full touch design for more convenient operation

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





# 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



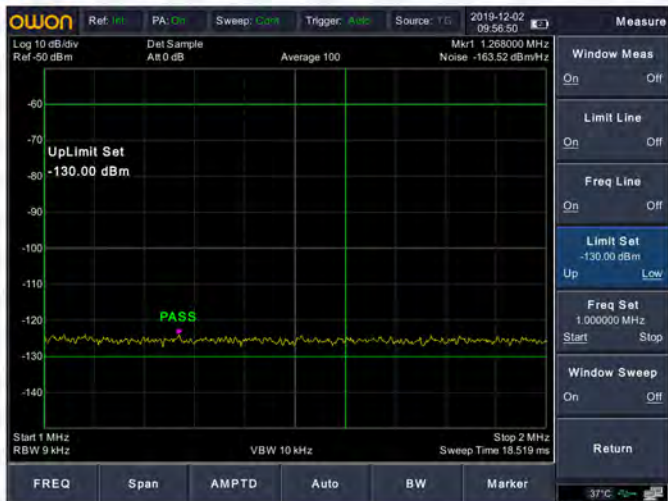
-160 dBm DANL (Displayed Average Noise Level), can observe weaker small signals

## More accurate low-noise measurements



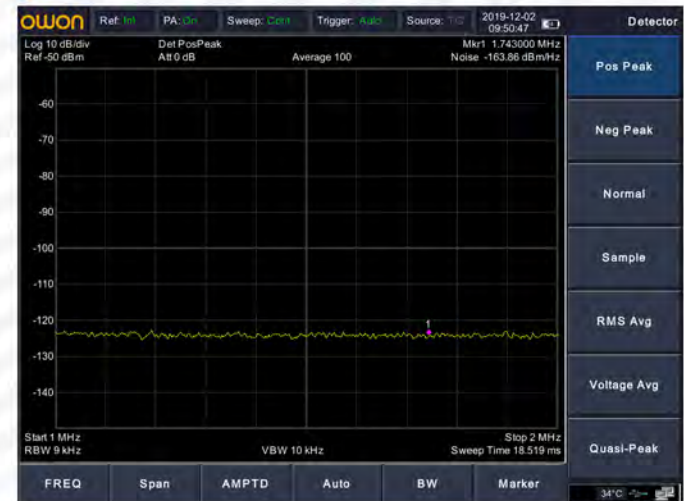
Phase Noise < -80 dBc/Hz @1GHz at 10 kHz offset

## Pass/Fail function



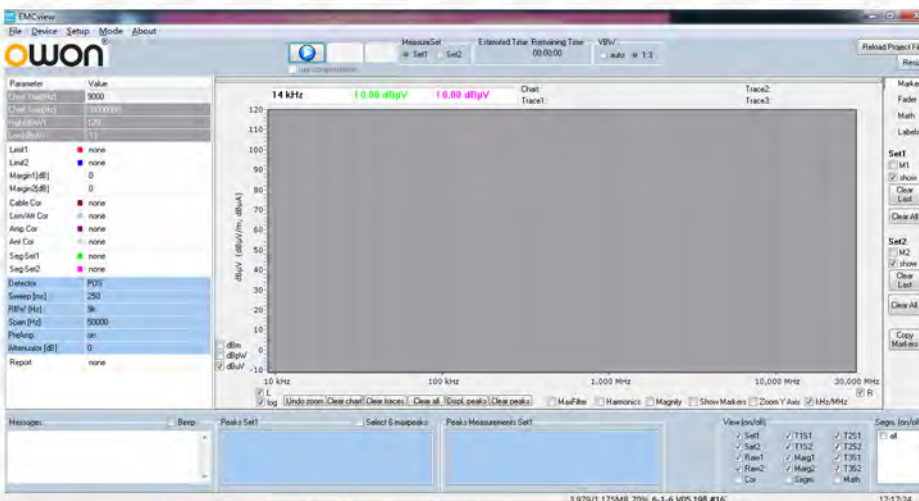
Quickly determine if the test results pass

## 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.



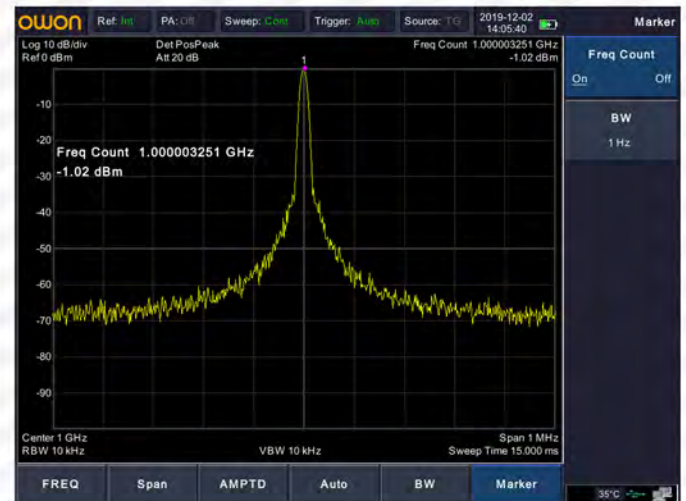
modulation signal quality analysis



audio demodulation

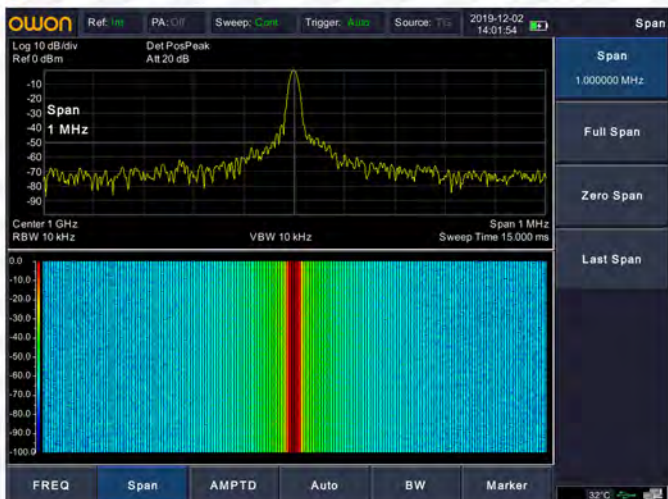


channel measurement



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.

# PRODUCT SPECIFICATIONS

| Model                                     | HSA015(TG)                                                                                                                              | HSA032(TG)                                                                |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Frequency Range                           | 9kHz - 1.5 GHz                                                                                                                          | 9kHz - 3.2 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 $\geq 20$ , 20°C to 30°C, Input Impedance=50 $\Omega$ , RBW normalizes to 1Hz) |                                                                           |
| 1MHz-10MHz                                | -160dBm (Typical)                                                                                                                       |                                                                           |
| 10MHz-1GHz                                | -160dBm (Typical)                                                                                                                       |                                                                           |
| 1GHz-1.5GHz                               | -158dBm (Typical)                                                                                                                       |                                                                           |
| 1GHz-3.2GHz                               |                                                                                                                                         | -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-1.5 GHz                                                                                                                         | 100 kHz-3.2 GHz (Tracking generator)<br>35 MHz-3.2 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 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.