

RSA500A Series vs. Anritsu Spectrum Master Series

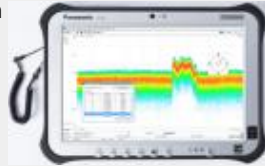
COMPETITIVE FACT SHEET

www.tektronix.com/usbrsa

Real Time for interference hunting

Tektronix RSA500A Series

- ✓ **Real Time Analysis** - Detects signals others miss in full 40 MHz bandwidth with 15 µsec POI
- ✓ **40 MHz Bandwidth** –support for wideband IoT wireless standards, record/playback, IQ acquisition,
- ✓ **Many Standard Features** – Interference Hunting (DPX, Spectrogram), IQ capture, GPS, analog demodulation
- ✓ **VSA and Standards Support** - General purpose support with 27 different modulation formats and dedicated measurement personalities for Bluetooth, WLAN, P25, and LTE power measurements,
- ✓ **Integrated software:** SignalVu-PC is a single SW pack containing all analysis functions
- ✓ **Take the weight off your hands** - 1 kg tablet in your hands



Anritsu Spectrum Master Series

- ✗ **Burst detect mode** – Single color trace with max 15 MHz span limit, 200 µsec POI only available
- ✗ **32 MHz Bandwidth** –I/Q Waveform Capture Option
- ✗ **Individual options add cost** – Interference Hunting, IQ capture, Spectrogram, GPS, analog demodulation
- ✓ **VSA and Standards Support** - support most of commercial wireless, digital TV broadcast standards
- ✗ **Separate mode required** – Long switching times switching between modes of operation (Interference analyzers, AM/FM/PM Analyzer,...)
- ✗ **3.7 kg to 4.4 kg spectrum analyzer in your hands**



Fast Sweeps for low noise floor

Tektronix RSA500A

- ✓ Conventional Spectrum Analyzer features
- ✓ Unique HW architecture to complete low noise floor sweeps very quickly
- ✓ Much faster sweep times for RBW settings less than 30 KHz
- ✓ Example: sweep times for a -134 dBm noise floor with a 1 kHz RBW is 8.3 second (7.5 GHz)

Anritsu Spectrum Master

- ✓ Conventional Spectrum Analyzer features
- ✗ Conventional Spectrum Analyzer architecture sweeps quickly in default settings, but slowly when looking at low noise floors
- ✗ Much slower sweep times for RBW settings less than 30 KHz
- ✗ Example: Example: sweep times for a -124 dBm noise floor with a 1 kHz RBW is 3 min in fast mode, and 40 min in performance or No FFT mode (7.5 GHz)

Key Specifications Comparison

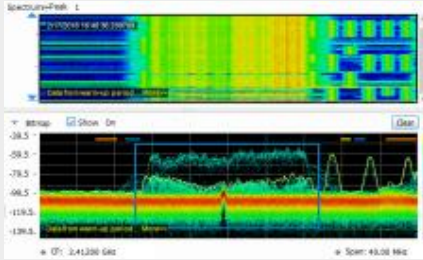
	Tektronix RSA500A Series		Anritsu Spectrum Master Series	
Bandwidth	✓	40 MHz	✗	32 MHz
Frequency Range	✗	9 kHz up to 18 GHz	✓	9 kHz up to 43 GHz
Real Time Analysis	✓	100% POI 15 µs in 40 MHz	✗	Burst detect mode: 15 MHz BW only, 100% POI of 200 µs
DANL (1 GHz)	✗	-163 dBm/Hz	✓	-164 dBm/Hz
SFDR	✓	-72 dBc	✓	-70~75 dBc
Cable and Antenna Testing	✓	Yes	✓	Yes
Weight	✓	1 kg tablet on hands, 3 kg instrument on shoulder	✓	3.7 kg to 4.4 kg

RSA500A Series vs. Anritsu Spectrum Master Series

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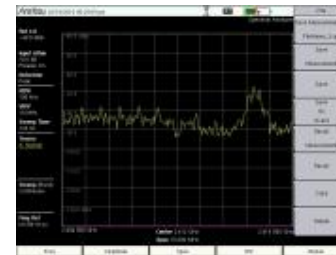
Real Time for live signal viewing

Tektronix RSA500A Series



- ✓ 10,000 FFT's per second for Live Signal Viewing across 40 MHz BW
- ✓ Color shows the number of times a spectral event has occurred
- ✓ Probability of Intercept displayed on screen to let you know performance with current settings
- ✓ Real time Spectrogram display also available to give more insights
- ✓ Example – ISM band WLAN and Bluetooth signals shown with real time displays

Anritsu Spectrum Master Series



- ✓ 15 MHz Burst detect mode can detect signals with low duration.
- ✗ With only one single color trace, co-channel interference or signal under signal is no way to be shown
- ✗ Example – The measurement speed (20,000 FFT's per second) is fast enough to capture transient signals, but it misses the details under the envelop.

Record/Playback

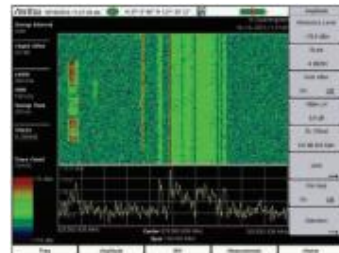
Tektronix RSA500A

- ✓ No limits on recording length – store 0.3 TB per hour of recording on a PC's SSD
- ✓ Playback file works just like a live measurement- make changes to settings, add measurements on the replay data
- ✓ Example – Recorded the 40 MHz ISM band IQ data seamless data, and adjust settings for the WLAN demodulation analysis with multiple displays



Anritsu Spectrum Master

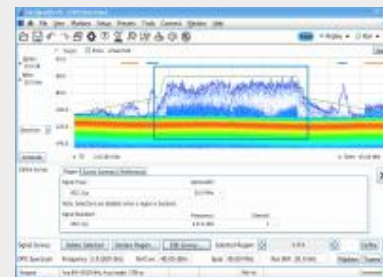
- ✗ Spectrogram is not standard, need to buy the Interference Analyzer and Spectrogram option
- ✗ Spectrogram records and playbacks the spectrum trace only, not underlying signal IQ data
- ✗ Example – Record/Playback the normal spectrum traces only



Signal classification Test

Tektronix RSA500A

- ✓ The optional signal classification toolset helps you classify signals.



Anritsu Spectrum Master

- ✗ No signal classification measurements