

## **Instrument Offers Double the Acquisition Bandwidth of Any Signal Analyzer in Comparable Price Range and Best Real-Time Capabilities**



Tektronix, Inc. today announced a significant expansion of its spectrum and vector signal analysis offerings with the introduction of the new RSA5000 Series Signal Analyzer. The new instruments raise the price-performance bar for mid-range signal analyzers by offering more than double currently available acquisition bandwidth and the world's best real time capabilities. By combining reduced time-to-insight and lower cost, the new series is ideal for numerous design and operations applications including spectrum management, radar, electronic warfare, radio communications and EMI/EMC.

As RF signals become increasingly complex and the use of ISM band technologies more ubiquitous, it is crucial that designers, engineers and operators are able to reliably and efficiently discover transient spectral phenomena created by digital RF circuitry over increasingly wider operational bandwidths. Traditional signal analyzers are unable to trigger on transient problems and the maximum available acquisition bandwidth in the mid-range is just 40 MHz.

Featuring advanced time, amplitude, and DPX™ trigger functions combined with swept DPX, the RSA5000 Series delivers discovery and capture of these intermittent and rapidly changing signals and up to 85 MHz bandwidth. This bandwidth now covers the entire ISM band where common technologies are used, such as, Bluetooth, Zigbee, RFID, and Wireless LAN.

The DPX Live RF spectrum display of the RSA5000 Series signal analyzer allows quick detection of previously unseen signal behavior, and improves test confidence by catching very short duration transients missed by conventional spectrum analyzers. The Swept DPX engine can collect up to 292,000 spectrum updates per second over its full bandwidth, up to 85 MHz, and can sweep the DPX across the full input range of the RSA5000 Series, up to 6.2 GHz. DPX is capable of measuring spectral transients as brief as 5.8  $\mu$ s.

To capture transients for analysis, the RSA5000 Series offers frequency mask, frequency-edge, density, time-qualified and runt triggers. It can also be used to isolate hard to find hardware and software anomalies with cross domain triggering between multiple instruments. It can capture a seamless time record of RF

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frequencies into deep memory for up to 7 seconds at 85 MHz bandwidth.

For faster troubleshooting, the RSA5000 Series provides the ability to analyze captured data in any domain at any time with correlated markers. Automatic pulse measurement and detection helps to simplify and save test time by supporting multiple measurements on the same set of captured data. This reduces the cost of test by providing a single versatile instrument that replaces multiple test sets.

Along with wide bandwidth and DPX display, the RSA5000 Series offers leading spectrum and vector signal analysis with +17 dBm TOI and -154 dBm/Hz DANL at 1 GHz along with superior low frequency performance with phase noise of -131 dBc/Hz at 10 kHz offset, -150 dBm DANL at 10 MHz carrier frequency.

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