



SIGLENT Technologies adds real-time capability to their existing range of Spectrum Analyzers.

Shortly after introducing models that extended maximum frequencies to 7.5 GHz, SIGLENT is proud to introduce another advancement. The new SSA3000X-R series brings real-time frequency analysis capability into the SIGLENT RF product portfolio. The instruments support a real-time analysis bandwidth up to 40 MHz and have a maximum frequency of 5 GHz and 7.5 GHz. The SIGLENT SSA3000X-R real time spectrum analyzers are powerful and flexible tools for complex RF signal monitoring and analysis.

The advertisement features a white SIGLENT SSA3000X-R Real-time Spectrum Analyzer on the left, displaying a colorful spectrum plot on its screen. To the right, the text 'OVERCOME THE TIME SHIFT WITH REAL-TIME' is written in a bold, white, sans-serif font. Below this, the product name 'SSA3000X-R Real-time Spectrum Analyzers' is highlighted in a blue box. A list of features follows: 'Frequency range: 9 kHz - 7.5 GHz', 'Up to 40 MHz real-time analysis bandwidth', '100% POI 7.2 us', 'Maximum acquisitions stored: 50,000', and 'Modulation Analysis function (optional)'. The background is a dark blue space-themed image with a circular pattern of numbers and symbols.

April 2020: SIGLENT Technologies presents a series of real-time spectrum analyzers. The new SSA3000X-R series combines the functionality of a classical spectrum analyzer with the benefits of real-time signal acquisition and analysis.

Addressable application areas include broadcast, cellular and near field communication systems and spectrum surveillance. It can be utilized for R&D, production or maintenance tasks and also in the educational sector.

The User Interface concept uses the same easy-to-use controls and menus as the popular SSA3000X and SSA3000X Plus series.

This includes the 10.1-inch touch screen, external mouse & keyboard control, and an integrated web server that make the analyzer operation intuitive, easy and comfortable.

Two models are available with bandwidths from 9 kHz to 5 GHz and 9 kHz to 7.5 GHz. They also feature a minimum resolution bandwidth (RBW) of 1 Hz and the standard integrated Pre-Amplifier which help to deliver a minimum DANL of -165 dBm. Together with the amplitude accuracy of <0.7dB, even the smallest signals just above the noise of the device can be detected and measured.

With the capabilities of up-to 40 MHz real-time analysis bandwidth, a 100% POI for signals which appear >7.2 μ s, the multi-dimensions' data displays, the advanced triggering and RF data capturing the Analyzer is able to solve many modern RF challenges.

The optional advanced measurements (SSA3000XR-AMK) includes channel power (CHP), adjacent channel power (ACPR), occupied bandwidth (OBW), TOI and waterfall diagram (monitor), the harmonic and carrier-to-noise ratio (CNR) measurements. These can help to solve various challenges in transmission or at communication systems.

An EMI option has been extended and now offers an advanced EMI measurement display. The available detectors have also been extended and now offer Peak, Average, RMS and Quasi-Peak detector types. EMI filter bandwidths of 200 Hz, 9 kHz, 120 kHz and 1 MHz following CISPR16.1 definition are available as well. The real-time capability of the instrument can also be utilized for EMI debugging purposes, e.g. for chasing and locating rarely appearing interference sources and broadband noise.

The SSA3000X-R also includes a vector signal analysis option for digital modulation types (SSA3000XR-WDMA). This option is designed to determine the quality of complex modulated signals and measures for example the error vector magnitude (EVM) of PSK, MSK or QAM modulated signals. The SSA3000X-R is able to analyze signals with up to 40 MHz modulation bandwidth.

Like the other SIGLENT SSAs, the X-R series also includes a standard integrated

Tracking Generator (TG). If combined with an external return loss bridge the Spectrum Analyzer turns into a scalar network analyzer.

Beside the great specifications, the flexibility in use and the possibilities of extensions make this new analyzer an indispensable tool for RF-circuit developments.