R & S RTO High-performance Family Introduces the 600 MHz Oscilloscope(2)

Fast detection of rare signal faults at an extremely high acquisition rate, excellent signal fidelity thanks to low-noise frontends, intuitive user interface for quick work: The R&S RTO for 1 GHz and 2 GHz bandwidth offers all this and much more. Rohde & Schwarz presents a new 600 MHz model in its high-performance oscilloscope family.

The R&S RTO with 1 GHz and 2 GHz bandwidth appeals to users with its high measurement accuracy, operating convenience and speed. These features are also in very high demand for applications at bandwidths below 1 GHz. This is why Rohde & Schwarz has added a 600 MHz model to its high-performance oscilloscope family. Jörg Fries, Director of the Oscilloscopes Subdivision at Rohde & Schwarz, explains: "The new 600 MHz version of the R&S RTO is a unique solution that enables users to perform complex in-depth analyses even in the lower bandwidth range."

For its R&S RTO high-performance product line, Rohde & Schwarz created a special ASIC with realtime processing of the digitized measurement results. Thanks to its multiple parallel processing capability, this ASIC attains an unrivaled speed that makes it possible to analyze one million waveforms per second. Conventional oscilloscopes capture signals during only 0.5 % of the acquisition cycle, but Rohde & Schwarz has increased the active acquisition time by a factor of 20, to 10 % of an acquisition cycle. Even with this high acquisition rate, all of the setting options and analysis functions remain available for measurements without reducing speed.

Rohde & Schwarz has also taken a new approach when designing the trigger system. Due to the all-digital trigger architecture, a technology first, the trigger and the captured data share a common signal path and a common time base. The result is exceptionally low trigger jitter and exact assignment of the trigger to the signal.

The low-noise frontend and the single-core A/D converter in the R&S RTO scope also help to ensure high accuracy. The A/D converter operates at 10 Gsample per second and achieves an exceptionally high dynamic range of more than seven effective bits. The result is minimal signal distortion and low inherent noise.

As regards user friendliness, the remarkably simple touchscreen operating concept has rapidly established itself on the market. The clever screen design includes semitransparent dialog boxes, preview icons with live waveforms and a configurable toolbar. It lets users accomplish even complex measurement tasks quickly and efficiently. The 10.4 inch touchscreen strikes the right balance between usability and compactness.

The R&S RTO in two- and four-channel models with 600 MHz bandwidth, plus a matching range of active and passive probes, are now available from Rohde & Schwarz. For more information on the oscilloscopes, visit www.scope-of-the-art.de [1].

Edited by Janine E. Mooney, Associate Editor

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[1] http://www.scope-of-the-art.de