

Tektronix Significantly Enhances Spectrum Analyzer Performance of World's First Mixed Domain Oscilloscopes

New MDO4000B Series with SignalVu-PC Now Offers Industry's Widest Bandwidth Vector Signal Analyzer for Advanced Modulation Analysis

BEAVERTON, Ore., Nov. 19, 2013 - Tektronix, Inc., a leading worldwide provider of test, measurement and monitoring instrumentation, today introduced the MDO4000B series of mixed domain oscilloscopes that features significantly enhanced spectrum analyzer performance and, when used with Tektronix SignalVu-PC, the industry's widest bandwidth vector signal analysis capability and deep support for WLAN 802.11 a/b/g/j/n/p/ac testing (see separate release).

Introduced in August 2011, the Tektronix mixed domain oscilloscopes have gone on to win more than a dozen industry innovation awards and continue to be the only oscilloscope with an integrated spectrum analyzer that can capture time-correlated analog, digital and RF signals for a complete system view of a user's device. Much of the popularity of the MDO4000 has been driven by the steadily increasing integration of wireless interfaces including Wi-Fi, Zigbee and RFID into everyday applications, meaning more engineers face the challenge of debugging a device with integrated RF. Engineers using the MDO4000 report significant gains in debug productivity coupled with the versatility and technical capability they need to tackle a wide range of test challenges.

"Incorporating WLAN into designs introduces a whole new level of complexity that can be challenging to debug on a system level without the right tools," said Fanny Mlinarsky, president and CTO of octoScope, a provider of wireless test solutions and services. "The MDO4000B with SignalVu-PC delivers the right capabilities at the right price point to enable embedded and WLAN module designers to rapidly debug systems without a steep learning curve."

At its core, a mixed domain oscilloscope combines the functionality of Tektronix popular mixed signal oscilloscopes (MSO) with a powerful spectrum analyzer in a single instrument. With the introduction of the MDO4000B Tektronix has significantly enhanced the performance of the MDO's spectrum analyzer compared to the original MDO4000 instruments. These enhancements include the following:

Spurious Free Dynamic Range (SFDR) has improved to 60dBc guaranteed and 65dBc typical (from 55/60 typical) giving users higher confidence while performing spurious searches.

Phase noise performance has improved as much as 20dB enabling close-in spurious measurements and phase noise evaluation.

Vector calibrated I&Q data enable high-accuracy modulation and vector measurements.

Maximum RF acquisition time has been doubled from 79 ms to 158 ms enabling longer time correlation with the rest of the system as well as the capture and analysis of multiple bursts of modulated data.

Lower Frequency Limit has dropped from 50 kHz to 9 kHz enabling EMI diagnostics over the frequency range specified by international regulations.

"As the release of the new MDO4000B series demonstrates, we are continuing to bring innovation to the mixed domain oscilloscope market we created in response to customers looking for a single tool to validate and debug complex components and system level issues in a form factor that is both familiar and easy to use," said Dave Farrell, general manager, Mainstream Oscilloscopes, Tektronix. "Due to its higher performing spectrum analyzer, the MDO can now be used as the acquisition engine for advanced modulation analysis of commercial wireless standards such as 802.11, as well as for many other RF applications."

When used with SignalVu-PC Vector Signal Analysis (VSA) software, the MDO4000B offers the industry's

widest bandwidth (≥ 1 GHz) vector signal analyzer, making this combination well-suited for such RF test and measurement tasks as general modulation analysis, pulse analysis, frequency and phase settling, radar and spectrum management.

Availability & Pricing

MDO4000B mixed domain oscilloscopes are available now globally. Prices start at \$12,400 US MSRP.

Wondering what else Tektronix is up to? Check out the Tektronix Bandwidth Banter blog and stay up to date on the latest news from Tektronix on Twitter and Facebook.

About Tektronix

For more than sixty-five years, engineers have turned to Tektronix for test, measurement and monitoring solutions to solve design challenges, improve productivity and dramatically reduce time to market. Tektronix is a leading supplier of test equipment for engineers focused on electronic design, manufacturing, and advanced technology development. Headquartered in Beaverton, Oregon, Tektronix serves customers worldwide and offers award-winning service and support. Stay on the leading edge at www.tektronix.com.

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