Optical modulation analysis solution boosts vertical resolution to 16 bits

Tektronix announced that its OM4000 Series Optical Modulation Analyzer can now drive the DSA8300 Digital Sampling Oscilloscope to perform analysis on PM-QPSK, QAM, and other complex-modulation signals with higher vertical resolution than real-time based solutions at lower total system cost.

With this enhancement to the OM4000, Tektronix is giving optical networking designers and manufacturers the flexibility to choose between real-time and equivalent-time acquisition systems to suit their measurement needs. Tektronix is the only supplier of optical modulation systems to offer a single modulation analyzer that works with both real-time and equivalent-time (sampling) oscilloscopes.

The OM4000 paired with the DSA8300 is ideal for network equipment manufacturers and designers who require higher vertical resolution than what can be accomplished with real-time oscilloscopes, or who are looking to lower overall system costs. Key capabilities provided by the DSA8300 in this application include:

· 16-bit vertical resolution and 450µV RMS noise floor at 60 GHz for added dynamic range and accuracy

· Up to 60 GHz bandwidth on four channels to help future-proof the system for next generation baud rates

· Timing jitter as low as 450fs RMS to enable visibility into real signal performance

“As the worldwide demand for bandwidth continues to grow at a rapid pace, our customers are being asked to find ways to increase the efficiency, data rates and reliability of optical network equipment while at the same time reducing cost,” said Brian Reich, general manager, Performance Oscilloscopes, Tektronix. “With this enhancement to the OM4000 Series, we are meeting these needs with cost-saving flexibility, higher vertical resolution and future-proof levels of measurement bandwidth.”

Tektronix OM4000 Series Optical Modulation Analyzer solutions enable efficient and accurate characterization of serial communications in fiber at 100 Gb/s and beyond. With coherent lightwave analysis capabilities, Tektronix provides the acquisition and display of constellation diagrams, Q plots, polarization analysis, and source laser stability to better understand fiber-based signal quality.

Availability
OM4000 support for the DSA8300 oscilloscope is available for order now, with delivery starting in June.

www.tektronix.com [1]

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