Fastest Sampling 12, 13 and 14-bit High Resolution Oscilloscopes in PCI, PXI, VXI & LXI

September 15, 2009 – Albuquerque, NM – ZTEC Instruments introduces three new series of high resolution 300 MHz bandwidth oscilloscopes in PCI, PXI, VXI and LXI form factors. The new ZT4420 (12-bit), ZT4430 (13-bit), & ZT4440 (14-bit) series of oscilloscopes are the fastest sampling oscilloscopes or digitizers available in PCI, PXI, VXI and LXI at these levels of ADC resolution.

All instruments offer 128 Msamples of acquisition memory on each input channel. The instruments can be interleaved for 256 Msamples maximum acquisition length on one half the channels.

- The ZT4440 series has 14-bit ADC resolution and a maximum real-time sampling rate of 400 MS/s per channel, or 800 MS/s max when interleaved
- The ZT4430 series has 13-bit ADC resolution and a maximum real-time sampling rate of 250 MS/s per channel, or 500 MS/s max when interleaved
- The ZT4420 series has 12-bit ADC resolution and a maximum real-time sampling rate of 500 MS/s per channel, or 1 GS/s max when interleaved

These oscilloscopes provide the same powerful triggering, acquisition, waveform math, and analysis functions that are commonly found in today’s performance benchtop instruments and that are found in ZTEC’s other M-Class oscilloscopes. In fact, they can replace benchtop oscilloscopes in many ATE, aerospace, defense and particle accelerator applications. The LXI instruments specifically are ideal for applications requiring remote monitoring and control as well as for portable test applications.

These powerful modular oscilloscopes are available in 2 channel models (ZT44x1 PCI, PXI, VXI and LXI) and in 4 channel models (ZT44x2 VXI and LXI only). With their on-board processing, the ZT4420, ZT4430, & ZT4440 series calculate over 40 waveform parameters related to a waveform’s voltage, time and frequency characteristics. Four calculation channels for performing basic and advanced math on acquired data are also standard with each oscilloscope. Math functions include
add, subtract, multiply, integration, differentiation, FFT, histograms, measurement trending and more.

These oscilloscopes accept a wide range of voltage levels, handling up to +/- 210 V CAT I direct inputs. With input ranges from 1 mV/div to 1 V/div (10 vertical divisions) for 50-ohm input impedance, and from 1.25mV/div to 5 V/div for 1M-ohm input impedance, they cover a wide range of voltage levels without the need for external signal conditioning (attenuators, probes, etc.). This is important in automated and remote test applications where it is difficult or impossible to quickly add/remove external conditioning.

Free instrument drivers from ZTEC help users easily integrate the ZT4420, ZT4430, & ZT4440 series into ATE and embedded test systems. Drivers and programming support are available for key programming environments including LabVIEW, LabWindows/CVI, MATLAB, COM, Visual C/C++, Visual Studio and others.

Additionally, all oscilloscopes include ZScope™ control and display software and the ZFind instrument locator and configuration utility. The intuitive ZScope™ soft front panel application, with the look and feel of a benchtop instrument, gives users complete control of the instrument and displays acquired waveforms, math waveforms, and waveform parameter data. ZFind™ enables users to easily identify what ZTEC instruments are installed on the current host and even share instruments with other computers. ZFind™ also lets users send SCPI commands to connected instruments and read back information from those instruments.

Prices for the ZT4420, ZT4430, & ZT4440 series start at $5,995 US.


Learn more about the ZT4440 series at http://www.ztecinstruments.com/oscilloscope/digital-oscilloscopes-zt4440.
About ZTEC Instruments

ZTEC Instruments is a pioneering modular instrument company whose product focus is oscilloscopes and waveform generators. ZTEC products are unique in that they provide powerful benchtop instrument capabilities in modular instrument form factors, including PCI, CompactPCI/PXI, VXI, and LXI. For more information about ZTEC Instruments and how our products can address your test and measurement needs, please visit www.ztecinstruments.com.