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PRESS RELEASE

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Yokogawa launches the world's first Precision Power Scope -Innovative PX8000 combines oscilloscope and power-analyzer technologies to offer new dimension in time-based power measurements-

Yokogawa has combined its world-leading expertise in power measurement and its long heritage in oscilloscope design to create the world's first Precision Power Scope: the Model PX8000.

The PX8000 brings oscilloscope-style, time-based measurement to the world of power measurement. It can capture voltage and current waveforms precisely, opening up applications and solutions for a huge variety of emerging power measurement problems.

The new instrument has 12-bit resolution with 100 MS/s sampling and 20MHz bandwidth. This means that the PX8000 can be used for accurate measurement of inverter pulse shapes, which can then be used to fine-tune inverter efficiency. A choice of input modules covers voltage, current and sensor measurements at voltages up to 1000 V RMS and currents up to 5 A RMS, with a basic accuracy of ±0.1%. Higher currents can be measured with external current sensors. The PX8000 can be configured to evaluate single phase and three-phase electrical systems.

In addition to delivering precision power measurement to give true insight into energy consumption and performance, the PX8000 incorporates a number of innovative features that support the crucial measurement and analysis of transient power profiles. It provides simultaneous voltage and current multiplication to give real-time power sampling, supporting both transient measurement (as standard) and numerical values averaged across the sample period. Up to 16 different waveforms – including voltage, current and power – can be displayed side-by-side, giving engineers instant “snapshots” of performance.

The PX8000 is powered by Yokogawa’s isoPRO™ technology, which offers industry-leading isolation performance at the highest speeds. isoPRO core technology, designed with energy-saving applications in mind, delivers the performance needed to evaluate high-efficiency inverters that operate at high voltages, large currents and high frequency.

The instrument also supports the capture of power waveforms over specific periods of time and cycle-by-cycle trends through the definition of start and stop “cursors”. This is particularly useful for examining transient phenomena and in the design of periodically controlled equipment. To ensure that such equipment complies with energy standards, it is vital to measure power consumption across a range of different modes from “sleep” to full activity – and all the transient states in between.

A variety of functions including arithmetical calculations, time shifting and Fast Fourier Transforms enables users to display waveforms with offsets and skew corrections. An automatic de-skewing function eliminates offsets between current and voltage signals that may be caused by sensor or input characteristics. Users can also define their own computations via equations that combine differentials, integrals, digital filters and a wealth of other functions.

The PX8000 makes it possible to simultaneously measure the harmonic components of voltage and current waveforms as well as the harmonic distortion factor. Harmonic measurements take place in parallel with conventional voltage and current measurements. Harmonics up to the 500th order of the fundamental can be measured.

Applications for the PX8000 cover everything from sustainable power to advanced robotics. Any situation where power consumption is at a premium – which means almost anywhere power is consumed – can benefit from the introduction of the PX8000’s precision measurement and

analysis capabilities. Typical application sectors include inverter and motor testing, reactor loss measurement of inverter boost circuits, transient responses of industrial robots, wireless charger efficiency measurement, and voltage and power measurements in electricity distribution systems.

For further information about the PX8000 visit www.tmi.yokogawa.com

About Yokogawa Test & Measurement

Yokogawa Test & Measurement Division is a major worldwide force in the test & measurement market, with products that include oscilloscopes, power meters and optical communications test equipment, portable test instruments, recorders and data-acquisition systems. For more information about Yokogawa Test & Measurement, please visit our website tmi.yokogawa.com.

About Yokogawa Corporation of America

Yokogawa Corporation of America (http://yokogawa.com/us) is a leading provider of Industrial Automation and Test and Measurement solutions. Combining superior technology with engineering, system integration, project management, and maintenance services, Yokogawa delivers field-proven operational efficiency, safety, and reliability. Yokogawa Corporation of America is headquartered in Sugar Land, TX, and is the North American Division of Yokogawa Electric Corporation's global network of 25 manufacturing facilities and 4 regional project engineering centers.

About Yokogawa

Yokogawa's global network of 88 companies spans over a total of 55 countries. Founded in 1915, the US$4 billion company conducts cutting-edge research and innovation. Yokogawa is engaged in industrial automation and control (IA), test and measurement, and other business segments. The IA segment plays a vital role in a wide range of industries including oil, chemicals, natural gas, power, iron and steel, pulp and paper, pharmaceuticals, and food. For more information about Yokogawa, please visit our website www.yokogawa.com.