

Yokogawa Test & Measurement Corporation
Tokyo, Japan – July 22, 2026

Yokogawa Test & Measurement Releases WT1500 Precision Power Analyzer - Meeting the power measurement needs of high-voltage xEV and renewable energy applications -

Yokogawa Test & Measurement Corporation announces the release on August 19 of the [**WT1500 Precision Power Analyzer**](#) as a new addition to the WT series. The WT series power analyzers are widely used as essential measurement instruments for the development and performance evaluation of powertrains for electric vehicles (xEVs) and renewable energy-related equipment. The new WT1500 features the series' first 2000 V DC input voltage capability and industry-leading measurement accuracy. It also incorporates a space-saving design for ease of use in test environments, resolver signal^{*1} input support, and multi-unit synchronization^{*2}. These features enable the WT1500 to meet evolving measurement needs in applications with higher voltages and increasing system complexity.



WT1500 Precision Power Analyzer

Development Background

Continued advances in xEV technologies and the growth of the renewable energy market is accelerating demand for evaluation, testing, and production capabilities built around high-voltage equipment. However, when measuring voltages exceed 1500 V, conventional power analyzers require dedicated high-voltage dividers, which can affect measurement accuracy and complicate wiring and equipment installation. In addition, measuring motor efficiency in xEV applications has traditionally required power signals and resolver signals to be measured separately and synchronized later on a PC. Combined with the challenge of fitting measurement instruments into conventional rack-mounted setups or limited desktop test environments, these requirements have made testing and evaluation processes complex and time-consuming.

To address these challenges, Yokogawa Test & Measurement has developed the WT1500, a power analyzer that eliminates the need for high-voltage dividers in systems up to 2000 V while significantly

enhancing usability, enabling more efficient and streamlined testing and evaluation workflows.

Main Features

1. High performance for high-voltage, high-precision measurement

The WT1500 delivers the highest level of measurement performance in the WT Series, maintaining outstanding measurement accuracy across a wide range of operating conditions. In addition, two types of input elements are available to suit specific applications, enabling a single instrument to support both the evaluation of high-voltage systems, such as energy storage systems (ESS) and power conversion systems (PCS), and the measurement of the latest xEV motors.

Main specifications:

- Total power accuracy of $\pm 0.038\%$ (DC, 50/60 Hz) and low-power-factor accuracy of $\pm 0.07\%$ of S^{*3} at 50/60 Hz
- High voltage element supports direct measurement up to 2000 V DC and 300 kHz, ideal for PCS and ESS applications.
- Wide bandwidth element supports up to 1000 V with a 2 MHz bandwidth, crucial for measuring the complex, high-frequency waveforms generated in modern xEV motors.
- Both inputs share a common sensor input and can be mixed in a single unit.

2. System integration and a space-saving design

Despite its compact form factor, which allows easy integration into test facilities, the WT1500 offers a wide range of communication interfaces and remote-control capabilities, enabling flexible connectivity with various testing and evaluation systems. It supports a broad range of applications, from seamless integration into automated evaluation systems to standalone measurement and analysis tasks.

- Supports up to four power measurements and four motor evaluations.
- Supports encoder and resolver signal inputs, IEEE 1588 time synchronization, data output to CAN/CAN FD buses, and low-latency data transmission via UDP communication.
- Equipped with a variety of interfaces that enable remote operation from a PC, external monitor, or tablet, allowing the WT1500 to be used as a standalone measurement instrument. A compact front-panel control interface also simplifies connection and configuration settings.
- A space-saving 2U design (19-inch rack width, approximately 88 mm high) makes it easy to integrate into evaluation system racks and test equipment installations.

3. Scalability for multi-channel measurements

For measurements requiring more than four channels, up to five WT1500 units can be synchronized, enabling 20-channel power measurement. One unit acts as the main controller, directing subunit configuration and consolidating data acquisition.

The WT1500 also features up to four unique current input terminals alongside the voltage terminals, providing power for current sensors. These, in combination with a series of new current adapters that are provided as accessories, enable the WT1500 to accommodate a wide variety of sensors: the CT Series penetration-type (D-sub Terminal, 60 A to 2000 A, AC/DC), the CT1000S split-core (BNC, 1000 A, AC/DC), and AC-only current clamp probes (BNC, 50 A and 200 A class). ^{*4}

^{*1} Position detection signal that outputs the motor's rotational angle as an electrical signal.

^{*2} Optional feature scheduled for release within 2026.

^{*3} Apparent power

^{*4} New current adapters are scheduled to be launched on August 19 and subsequently rolled out throughout 2026.

Major Target Markets

- EV/xEV, automotive
- Power
- Renewable energy (PCS/ESS)

Applications

- Four-channel power measurement, handling both single-phase and three-phase inputs simultaneously, using a PC to manage system configuration and data acquisition.
- Measurement of two-system inverter motors and e-Axle systems using dual-WT1500 and single unit setups, respectively.
- Multi-unit simultaneous measurement and high-voltage measurement of ESS and PCS.

For More Information

<https://tmi.yokogawa.com/solutions/products/power-analyzers/wt1500-precision-power-analyzer/>

About Yokogawa Test & Measurement

Yokogawa has been developing measurement solutions for 110 years, including over 40 years in optical instruments, consistently finding new ways to give R&D, production and field maintenance teams the tools they need to gain the best insights from their measurement strategies.

The company has pioneered accurate power measurement throughout its history, and is the market leader in digital power analyzers and optical spectrum analyzers. Yokogawa measuring instruments are renowned worldwide for their high levels of precision, quality, durability, and service support.

Meet the precision makers at <https://tmi.yokogawa.com/>

About Yokogawa

Yokogawa provides advanced solutions in the areas of measurement, control, and information to customers across a broad range of industries, including energy, chemicals, materials, pharmaceuticals, and food. Yokogawa addresses customer issues regarding the optimization of production, assets, and the supply chain with the effective application of digital technologies, enabling the transition to autonomous operations.

Founded in Tokyo in 1915, Yokogawa continues to work toward a sustainable society through its 18,000+ employees in a global network of 135 companies spanning 63 countries.

For more information, please visit www.yokogawa.com/

The names of corporations, organizations, products, services, and logos herein are either registered trademarks or trademarks of Yokogawa Test & Measurement Corporation or their respective holders