

## **Power analyzer enables precise current measurements on real-world signals**



Tektronix announced its new precision multi-phase Power Analyzer. Featuring the industry's first Spiral Shunt design (patent application submitted), the Tektronix PA4000 Power Analyzer gives power electronics engineers stable, precise current measurements even on highly distorted power waveforms common in many applications.

With energy efficiency and new power sources often taking center stage in the world of electronics design, engineers need newer and more advanced tools to keep up with consumer demand, changing technologies, government regulations and added workload. The PA4000 rounds out the Tektronix portfolio of oscilloscope-based power test offerings, enabling an end-to-end solution that provides the performance to measure for conformance to regulatory standards today and in the future. Combined with ease-of-use, application-specific test modes and a full set of standard features including communication interfaces and PC-based software, the PA4000 will prove to be the industry's power analyzer of choice.

### **Performance, features tailored to demanding test requirements**

Power analyzers such as the PA4000 are used by power electronics engineers for designing, testing and validating power electronics devices, primarily in multi-phase applications. Key industries include motor drives, electric propulsion, backup power, alternative energy, and high-efficiency lighting. Many of these engineers work on designs that are subject to government regulations and customer requirements that dictate efficiency and the amount of harmonic distortion or other "line pollution" that may be imposed on the power grid.

Offering highly accurate power, energy and efficiency measurements, the PA4000 will help engineers meet these government and customer requirements. It features precisely-matched inputs, wide input ranges and advanced signal processing to deliver consistently high measurement accuracy in all types of measurement environments.

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A particularly difficult challenge due to the rise of new higher-performance technologies is obtaining consistently high measurement accuracy. The PA4000 uses two Spiral Shunts on each channel – one for current measurements up to 1 A, for precise low-current measurements, and one for current measurements up to 30A, for higher-current measurements. This state-of-the-art shunt design is then combined with unique high-speed digital signal processing algorithms, allowing the PA4000 to track power cycles accurately, even in the presence of transients and noise.

To save engineers setup time and reduce errors, the PA4000 offers a broad set of application-specific measurement modes such as standby current, motor drive and ballast. The analyzers are competitively priced and among the many features that come standard they provide LAN, USB, and RS-232 interfaces as well as, harmonics measurement capability up to the 100th harmonic. In addition, software for controlling the analyzer, downloading measurements, and logging on a PC is also included in the package.

### **Pricing & availability**

The Tektronix PA4000 Power Analyzer will be available worldwide starting in April 2013 with US MSRP starting at \$10,500.

[www.tektronix.com](http://www.tektronix.com) [1]

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### **Links:**

[1] <http://www.tektronix.com>