

# WAGO's New 3-Phase Power Measurement Module Assists in Managing Energy-Related Costs

**Germantown, WI** - February 2008 - WAGO Corporation's new, 750-493 3-Phase Power Measurement Module integrates comprehensive monitoring of a power supply network with the connectivity of an I/O system. At just 12 mm wide, the high-density, 6-channel 750-493 represents a cost- and space-effective solution to power system supply management.

## **An I/O Solution Dedicated to Maximum Connectivity & Flexibility**

While most competitive power measurement modules are stand-alone units relying on proprietary connectivity to external devices, the 750-493 is a component of a remote I/O or distributed control system. Thus, it is compatible with 16 different fieldbus networks (including Ethernet, Profibus, Modbus, and DeviceNet) and the 300+ digital, analog, and special function modules found in the WAGO-I/O-SYSTEM, making it flexible and efficient to analyze and distribute power supply data. When one or more 750-493 modules are connected to a WAGO controller, the solution can be programmed with WAGO-I/O-PRO CAA for data logging, time stamping and historical analysis.

"Placed in the industry's smallest modular I/O housing, the 750-493's versatility makes it the ideal solution to power measurement," said Mark DeCramer, Product Manager for the WAGO-I/O-SYSTEM. "Because the DIN-rail mountable 750-493 was designed as an I/O system component, much of the complexity associated with traditional modules has been minimized. There is no need for the subsequent costs related to stand-alone modules, such as power feeds, additional networking and special mounting."

## **Power System Security and Optimization**

The 6-channel power measurement module has three channels dedicated to voltage input and three channels dedicated to current input and is available in 1A and 5A variations to support standard current transformer signal levels. The intelligent module directly measures voltage, current, energy consumption and power factor ( $\cos\phi$ ) to calculate effective power and track energy consumption rates. The data provided by this module can be utilized to ensure economical operation and equipment safety. For example, this data may allow the control system to optimize power supply to a drive/machine, schedule preventive maintenance in the event of excessive energy consumption and detect instant or cumulative loading in motors, initiating a pre-emptive shutdown for equipment protection.

"The 750-493 is also well-suited to building automation, where it monitors loading, balance and phase loss of lighting circuits and HVAC transmission lines," DeCramer added. "This enables facility managers to contend with escalating energy costs and fluctuating demand-based power rates."

## **Features Place Emphasis on Ease of Use**

The 750-493 has four status LEDs indicating undervoltage conditions for each of the three phases, as well as module status. As with all WAGO-I/O-SYSTEM modules, the termination points in the 750-493 utilize CAGE CLAMP<sup>®</sup> wiring technology for fast, easy and maintenance-free wiring. For convenience, it also features WSB-Markers for individually labeling termination points.

WAGO is the worldwide leader in spring pressure connection technology that eliminates loose wires as a result of vibration and temperature cycling, as well as provides highly reliable, corrosion-resistant and maintenance-free connections. Our complete line of spring pressure connection products includes: DIN-rail mount terminal blocks, chassis mount terminal blocks, PCB mount terminal blocks, relays, signal conditioners, power supplies, surge suppressors, the WAGO-I/O-SYSTEM and more.

For more information contact WAGO at 1-800-DIN-RAIL or via e-mail at [info.us@wago.com](mailto:info.us@wago.com).