



INSTRUMENTATION

Transmitter Now Provides Ethernet/IP Connectivity



The Liquiline CM44 multichannel transmitter is easily configured, monitored, and diagnosed by the company's PlantPAx Process Automation System. It is suitable for applications in the water, wastewater, chemical, and power industries, among others. The transmitter features an integrated web server that allows the operator to remotely view diagnostic data, perform configuration, or access device parameters via any web browser.

Operators can now use Ethernet/IP connectivity to access parameters and accept inputs down to the sensor level, including sensor condition and diagnostics. The modular four-wire transmitter is available with one to eight channels and can be expanded at any time, and users can swap or mix and match any combination of sensors. The CM44 recognizes the sensor and will begin operating immediately without rebooting.

Endress+Hauser
www.us.endress.com

Controller Offers Water and Process Treatment Automation

The OnGuard i controller features a new chemical feed and control system that provides performance- and

knowledge-based control of specialty chemical applications. It has a powerful coprocessor that uses proprietary software to perform complex calculations and can be configured to control virtually any key performance indicator. This allows users to fully customize and automate their water or process treatment program, while maximizing benefits such as reduced water, energy, and chemical consumption.

Ashland, Inc.
www.ashland.com

Weight Transmitter Handles Static and Dynamic Weighing Applications



The Model 201 weight transmitter is capable of powering up to eight 350-ohm load cells and comes with a 35-mm DIN rail mounting bracket. It has a six-digit LCD display that is 0.5 in. tall, has up to seven different colors, and is viewable in lighting of any level. A variety of mounting and control options simplifies quick visual verification of weight status. The Model 201 can sample at rates of up to 200 samples per second and includes the standard communication protocols: serial interface RS232/RS485, mini USB-B, analog (0–10 V or 4–20 mA), Ethernet TCP/IP, EIP, and Modbus TCP. Four programmable digital inputs and outputs come standard. Connectivity setup is simple, with a legend on the front of the enclosure. Setup and

calibration of the weight transmitter is fast and easy using either the onscreen indicator menu prompts or web browser interface via IP address. The enclosure is compact and can be DIN rail mounted, with the display mounted either internally or remotely.

Cardinal Scale Mfg. Co.
www.cardinalscale.com

Electric Actuators Eliminate the Need for Compressed Air

AEL6 Series smart high-speed linear actuators are suitable for applications that require fast response from control valves and a high thrust fail-safe function. Because of their low energy consumption, the actuators have a low lifetime cost. Quick installation and commissioning ensure reduced plant downtime. The ability to develop preventative maintenance schedules further reduces downtime required for repair work.

Spirax Sarco, Inc.
www.spiraxsarco.com/us

FLUIDS AND SOLIDS HANDLING

Gate Valve Withstands High Pressures and Abrasive Slurries

The KSV severe-service knife gate valve can handle tough applications in the chemicals, biofuels, pulp and paper, steel, and power generation industries. A rigid one-piece body, 100%-diameter port, hard-faced gate, and rotatable seat rings are among the many features that make this valve style suitable for isolation in high-pressure, high-density slurry lines. The valve is pressure/temperature rated to ANSI B16.34 Class 150 and 300, and a bonnetless design is rated for ANSI 300 service. It is available in sizes of 3–60 in. and has bidirectional dead-end shutoff capabilities and a bidirectional driptight seal.

DeZURIK, Inc.
www.dezurik.com

Submersible Motor Boasts High Energy Efficiency

The Pleuger PMM6 is a submersible electric motor that utilizes permanent magnet technology. This new model has high energy efficiency at full and partial loads, low thermal losses, and a large air gap configuration. It has a 150-mm motor with a power output of 5–45 kW. Operated in conjunction with a variable-frequency drive, the PMM6 runs at synchronous speed with no rotor losses, which allows the pump to run at its best efficiency point under variable flow conditions.

Flowserve Corp.

www.flowserve.com

Flow Monitor Features an Easy-to-Use Display Platform

The ER-500 Series flow monitor has a durable, NEMA 4X-rated enclosure so that it can be installed in challenging environments. The ER-500 connects flowmeters in a network for remote monitoring and process automation. Robust alarm parameters provide faster warnings when a change occurs in the process or pipeline. The monitor's dot-matrix display offers enhanced totalization options, and provides simultaneous display of flowrate and total flow. The standard communications interface is 4–20 mA and total pulse; an advanced interface adds two control alarms and a Modbus remote terminal unit (RTU) over RS485 connectivity.



Badger Meter

www.badgermeter.com

LABORATORY EQUIPMENT System Makes High-Performance NMR Easy to Use



The ProPulse nuclear magnetic resonance (NMR) system is a suitable platform for applied chemistry research, drug discovery, food science, and metabolomics applications. The compact unit comes standard with the company's VnmrJ software, which provides a comprehensive, intuitive interface to generate high-quality data with increased speed and simplicity. The combined hardware-software package empowers researchers to easily perform complex NMR experiments with consistent results. It includes the VeriPulse toolkit, which automatically optimizes performance and minimizes maintenance costs. Wireless tablet compatibility makes system monitoring possible and simple from anywhere in the lab.

Agilent Technologies, Inc.

www.agilent.com

Diffuse Reflectance Probe Empowers Near-Infrared Process Analysis

The FDR-798 near-IR diffuse reflectance probe is designed for the contact analysis of optically scattering materials, such as pharmaceutical powders, polymers, and food products.

It includes an integral hand-operated retraction mechanism that is suitable for use with bioreactors and other small reaction vessels. A sanitary fitting and flush chamber allow periodic cleaning of the probe tip. Key characteristics of the probe include high collection efficiency, low stray light, robust construction, and excellent chemical resistance.

Axiom Analytical, Inc.

www.goaxiom.com

High-Precision Digital Pipettors Are Available in Eight Models



The Ultra EZpette provides both accurate and precise liquid dispensing in a comfortable ergonomic design. Eight models in pink or blue cover a volume range from 0.1 μ L to 10 mL. The Ultra EZpette also includes a calibration tool for easy in-lab recalibration. It features a volume lock for consistency, a durable sealing system that maintains its effectiveness for 60,000 cycles, a large pipetting pushbutton, and an ejector with a unique click-to-fix system to easily adjust the tip ejection. A comfortable finger hook, contoured handle, and soft spring system minimize hand fatigue. All pipettes are fully autoclavable and UV resistant, and are tested individually and supplied with a certificate of quality.

Denville Scientific, Inc.

www.denvillescientific.com