



Product Digest

this month's topic **Instrumentation**

Versatile Sensors Provide Ammonium Measurements



The MVS10 and MVS17 sensors determine ammonium concentrations for water and wastewater applications. They operate at temperatures from 0°C to 40°C and at pressures from 0 to 50 psig. The sensors use long-life electrode cartridges to measure the activity of ammonium ions at concentrations of 0.1–14,000 ppm over a pH range of 2–8. The MVS10 is an insertion- or immersion-style sensor that may be used in pipe tees or on the end of a standpipe. The MVS17, with its retractable design, may be inserted into a pipe without interrupting the process flow. Both sensors are also available in models that measure pH, oxidation reduction potential (ORP), dissolved oxygen, conductivity, resistivity, and other specific ions.

Electro-Chemical Devices
www.ecdi.com

Level Indicators Function without Electricity



TL Series tape level indicators are designed to measure tank liquid levels in areas where electrical power is unavailable. The tape measure is sealed inside a liquid-tight stem, and a magnet around the stem floats on the surface of the liquid. The user determines the liquid level in the tank by sliding the tape out of the stem tube and reading the graduation mark when the magnetic interlock is felt. Three models are

available — a brass stem with a nitrile rubber float, a stainless steel stem with a polypropylene float, and a stainless steel stem with a stainless steel float. Lengths of up to 6 ft are offered.

Madison Co.
www.madisonco.com

Transmitter Features Improved Display Visibility



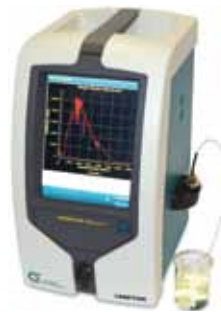
The Signet 9900 SmartPro transmitter provides a single-channel interface for multiple parameters, including flow, pH, conductivity/resistivity, pressure, temperature, and salinity, among others. It features a large backlit display with a dial-type digital bar graph and separate lines for units and measurements. The transmitter integrates with the PC COMM software for quick device configuration. Panel- and field-mount versions are available, and both configurations run on 12- to 32-VDC power. It is appropriate for use in wastewater treatment, chemical dosing and delivery, metal and plastic finishing, fume scrubbers, cooling towers, and filtration processes.

GF Piping Systems
www.gfpiping.com

Spectrometer Determines Fuel Properties

The portable Miniscan IRXpert analyzer uses mid-IR and near-IR spectroscopy to analyze gasoline, diesel, and biodiesel blends. More than 12,000 data points from the infrared spectrum are used to determine the concentration of molecules in a sample. The IRXpert characterizes samples based on more

than 40 important fuel properties, and performs compound analysis according to international standards. It features a full-color touch screen, a temperature-controlled density meter, and USB and Ethernet connectivity.



Grabner Instruments
www.grabner-instruments.com

Level Sensor Withstands Dusty Conditions

The sealed electronic compartment of the SmartBob-TS1 continuous level sensor makes it suitable for use in dusty environments. This bob-style sensor measures the levels of powders and granular materials in bins, tanks, and silos up to 60 ft tall where high levels of dust are present, especially after filling. A spherical float-bob option is available for use in liquid and slurry applications. The SmartBob-TS1 is ZigBee and RS-485 communication compatible, and can output a 4–20-mA signal to a programmable logic controller (PLC) or human machine interface (HMI). Bin measurements can be stored in the eBob software, and displayed as either height of product or percent full.



BinMaster
www.binmaster.com

Valve Controller Supports Wireless Wellhead Automation

The VC10 valve controller is a battery-powered wireless field device



that supplements natural gas wellhead automation systems. It uses a patent-pending technology called Progressive Pulse Control

(PPC) to control pneumatic valves in hazardous locations. The VC10 is capable of operating for more than 50,000 cycles maintenance-free. The controller features an LCD display and two digital inputs — one configured as a counter for use in plunger arrival systems, and another for use with any discreet signal. An integrated pressure sensor provides feedback for the PPC circuit.

Telemetry & Remote SCADA Solutions

www.controlmicrosystems.com

Infrared Sensors Measure Non-Graybody Temperatures



The Pro 100 and Pro 200 Series multiwavelength infrared temperature sensors operate in applications where thermocouples and resistance thermal devices (RTDs) are inaccurate, too slow, or too difficult to use. These sensors provide aim-and-read capabilities for non-graybody materials (*e.g.*, stainless steel, aluminum, brass, etc.) that are not accurately measured by single- or dual-wavelength sensors because the change in their emissivity

varies with wavelength. The sensors measure the amount of infrared energy emitted by an object's surface, then convert this signal into a temperature value between 200°F and 4,500°F. Pro 100 sensors utilize visual or laser aiming alignment; Pro 200 sensors utilize fiber-optic alignment. Both sensors can be used as stand-alone transmitters, or can incorporate remote interface modules and software.

Williamson Corp.

www.williamsonir.com

Indicator Features Explosionproof Housing



Loop-powered indicators provide a local display of a sensor's measured value. The MLX loop-powered indicator operates from a 4–20-mA DC input, and its NEMA 4X aluminum housing meets Factory Mutual (FM) explosionproof requirements. It includes a six-digit numerical LCD display, a six-digit alphanumeric display for engineering units, and a 20-segment bar graph that indicates 0–100% of full scale. Stainless steel tags and epoxy resin or polyurethane-epoxy paint coatings are available.

Yokogawa Corp. of America

www.yokogawa.com/us

Chromatography Cartridges Feature Improved Silica

SNAP Ultra high-performance flash chromatography cartridges utilize HP-Sphere silica to produce reliable separations. The high surface area of

HP-Sphere silica allows higher sample loading, so smaller cartridges may be used to achieve the same separation. SNAP Ultra cartridges are available in a range of sizes from 10 to 340 g, and feature a removable cap for internal sample loading.

Biotage

www.biotage.com

Transmitter is Suitable for Hazardous Area Applications

The RT-30 flow transmitter with local display is now available in an explosionproof model (RT-30EX) and a non-explosionproof model. It is CSA certified for use in the U.S. and Canada. The transmitter has a built-in 30-point linearizer, an extended power supply range of 9–24 VDC, and a backlit LCD display. It features seamless thread-in installation, flexible mounting with 360-degree rotation, a NEMA 4X weatherproof enclosure, and HART communication capabilities.

AW Gear Meters

www.awgarmeters.com

Transmission Probe Eliminates Fouling with Spray Nozzle

The FPT-850SCN is a self-cleaning, fiber-optic transmission probe for near-infrared process analysis. It is best suited for applications prone to the gradual buildup of particulate matter on probe windows. It features an integral spray nozzle that directs a high-pressure liquid solvent or vapor stream at the probe windows. This allows the windows to be cleaned without withdrawing the probe from the process vessel or flow line. The FPT-850SCN includes a sapphire-to-metal welded pressure seal for operation at temperatures up to 400°C. The patented design eliminates internal optical fibers to maximize the product's lifespan.

Axiom Analytical, Inc.

www.goaxiom.com