

Temperature Calibrator

ASL has introduced a metal-block bath, or dry well, for calibrating high-temperature sensing devices that can produce a stable

identification and quantification. The new detector is well suited for portable applications in which light weight, low power consumption, and small size are important. It will interface with any standard spectroscopy or counting system. The unit comes with a 6-ft connecting cable and can be used immediately on receipt.

eV Products

373 Saxonburg Boulevard
Saxonburg, PA 16056
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Speed Sensor

GMH Engineering has brought a new Doppler radar-based, noncontact speed sensor

to market. The DRS 1000 can measure speeds of 1 to 300 mph with an accuracy of better than 0.85%. The unit produces a digital pulse output proportional to speed and is powered by a 12-V dc power source. The sensor, 2 in. in diameter and 4 in. long, weighs about a half-pound. Typical applications include measuring vehicle ground speeds during performance testing, racing, or crash tests; measuring product speed on conveyor belts; and measuring manufacturing process speeds.

GMH Engineering

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and uniform temperature source up to 1,100° C. The B1100 can accommodate a variety of sensor configurations through the use of interchangeable inserts. It can be used with ASL's bridges and instruments for NIST-traceable calibration of platinum resistance thermometers and thermocouples. Options include an RS232 interface for computer-instrument communications, carrying cases, and an integral-temperature indicator.

ALS, Inc.

100 Brickstone Square
Andover, MA 01810

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Radiation Detector

eV Products' newest handheld radiation detector offers easy, room-temperature operation. SPEAR (single-point extended area radiation) is a probe consisting of a 5 × 5 × 5 mm cadmium/zinc/tellurium detector and low-noise hybrid preamplifier in a 0.5 × 3.5 in. housing. The new technology of SPEAR detectors provides better charge-collection and photo-peak efficiency, and reduced tailing and an improved peak-to-valley ratio for easier isotope



fluid delivery systems, such as those used in semiconductor plasma etching and chemical vapor deposition. Two 870B types are available, one with a single-ended connection and the other with a flow-through connection. The building-block design, which uses industry-standard end-to-end dimensions and electrical connectors, allows in-field upgrades without the need for tools.

MKS Instruments, Inc.

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Magnetic-Field Transducer

GMW Associates is distributing Sentron AG's new series of three-axis magnetic-field transducers. The devices are self-contained, low-power, high-linearity, high-stability, magnetic-field-to-analog-voltage transducers. Applications include the mapping of fields for magnetic quality control or field shimming, remote position location and orientation in an external field, and calculating current distributions in complex systems such as electromechanical cells or electric furnaces. The transducers are based on a unique Hall sensor that measures all three components of a magnetic field at a single point. Some versions are capable of magnetic-field-to-voltage conversions of better than 0.1% absolute accuracy. The sensors have better than 0.1° alignment accuracy and an active volume of less than 0.25 × 0.25 × 0.2 mm. The sensors are permanently connected by a 3-m cable to a small electronics module housed in an electrically shielded aluminum case. Other cable lengths are available as an option.

GMW Associates

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Pressure Transducer

MKS Instruments has announced its new 870B-series Micro-Baratron miniature pressure transducer for use in delivery systems that feed ultrapure gases into critical process systems. The transducer's capacitance-based pressure sensor has a diameter of 1.1 in. and provides accuracy within 1% of reading. This accuracy specification includes the effects of nonlinearity, hysteresis, and repeatability. The pressure reading is independent of gas composition. The new transducers are compatible with corrosive-gas and liq-



Inductive Sensors

Kaman Instrumentation's family of high-precision, high-performance sensors ranges from standard devices to those custom made to solve specific problems. Kaman sensors are based on eddy-current technology and provide measurements that are stable and repeatable, making them ideal for use with metal targets. The devices are resistant to harsh environments and unaffected by humidity, dust, and other contaminants. They can operate at temperatures from 4 K to 538° C. Standard sensor features include measuring ranges from 0.0002 to 2.5 in., high-speed analog and digital signal conditioning, and stainless steel housings. Applications include industrial, semiconductor, disk-drive, biomedical, automotive, plastics, metals, and metal-forming uses.

Kaman Instrumentation Corp.
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Illuminance detector

International Light's new illuminance detector accurately measures the perceived brightness of light to the human eye, regardless of the color or the spectral distribution of the source. The IL SED (SEL) 033/ZCIE/W is a scotopic detector and filter combination. It weights incoming light in proportion to the effect the light would produce on a human eye, and the detector can deliver an accurate illuminance measurement in a single reading. Applications include the development of night-vision systems and anticollision, emergency, and dashboard-panel lighting. The new detector is designed for use with International Light's

IL17100 and IL1410A photometer systems and is able to operate over a dynamic range of 5×10^{-4} to 1×10^6 lux.

International Light, Inc.
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Load Pins

Sensotec's new Model LP load pins are designed to sense shear forces, both tension and compression, typically found in tongue and shackles and in sheave assemblies. Load pins are available to sense forces over a range of 1 to 100 tons. The LP's all-welded, stainless steel construction withstands extreme temperature and humidity and the corrosive conditions found on land-based and offshore oil rigs and in mining, aerospace, and engine-test operations. The new load pins provide highly accurate 0.5% full-scale linearity, and they have an overload capability of up to 250%.



Sensotec, Inc.
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Fluxmeter

Lake Shore Cryotronics' introduction of its new low-drift, high-performance fluxmeter brings to market a precision integrating instrument that works with a variety of sensing coils to measure static fields and changing magnetic flux. The 480 has a peak response rate of 2 μ s, which allows it to keep up with the fastest magnetizing pulses. Both a positive and negative peak can be captured and displayed simultaneously from a single pulse, and the 480 is capable of making low-drift field measurements of alternating magnetic flux with a frequency response of 2 Hz to 50 kHz. Applications include manual and automated magnetic testing and sorting, magnetizing, and material analysis. The 480 allows the user to

save parameters for up to 10 existing coils or probes and to quickly switch between them. Coils wound by the user and coils from other manufacturers can be used with the 480.

Lake Shore Cryotronics, Inc.
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New Literature



Specialty Inorganics

CERAC has released its updated, free catalog of specialty inorganic chemicals, evaporation materials, and sputtering targets. The 350-page catalog lists the most widely used materials for processes, ranging from vacuum deposition and sputtering to ceramic and flame-spray applications. In addition to off-the-shelf materials for researchers in optics and ophthalmics, aerospace, photovoltaics, and other high-tech industrials, CERAC offers custom-manufacturing services.

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