

AlignMeter

Melles Griot has introduced the AlignMeter, a new instrument that simultaneously measures laser-beam position and angular displacement of beams up to 8 mm



in diameter. Whereas angular displacement previously had to be calculated by distance and position, the AlignMeter measures angle and position with an accuracy of 1 mrad and 1 μm , respectively, without the need to know the distance of the source from the sensor. Results are updated at 10 Hz. The AlignMeter also measures absolute output power from 10 μW to 10 mW at wavelengths ranging from 350 nm to 1.06 μm . The card-based system requires a host personal computer, and models are available for either a standard PCI card or for laptop users. Applications include alignment of gimbals, robotic arms, fibers, lasers, wafers, and optical components.

Melles Griot, Photonics Components
16542 Millikan Avenue
Irvine, CA 92606
Circle No. 180 on Reader Service Card

Filter Module

Alligator has introduced the SCS-818, the latest addition to its line of signal-conditioning modules. The SCS-818 is a high-performance amplifier and four-pole Butterworth low-pass filter with a custom differential output stage that can drive analog measurement and control signals for more than 50 m—many times the usual maximum distance. Its high density of signal amplification and filtering enables users to reduce the number of computer-based

controllers typically used to overcome the electrical noise of industrial and process-control environments. The SCS-818 also includes enhanced analog-digital range resolution, reduced offset of high gain, and a proprietary dc transformer circuit that provides true differential output with 10- Ω output impedance. It is well suited for use in rugged environments.

Alligator Technologies
2900 Bristol Street, Suite E-101
Costa Mesa, CA 92626
Circle No. 181 on Reader Service Card

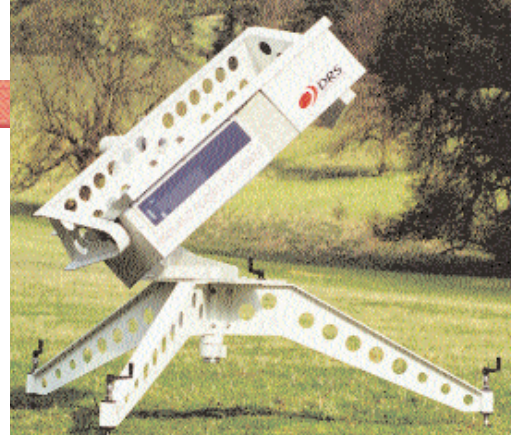
Input-Output Module

Acromag's new PMC730, a multi-function PCI mezzanine card (PMC), combines the capabilities of four separate input-output (I/O) modules on a single card that plugs into PMC slots on VME-bus and CompactPCI CPU boards. Because the new module performs analog input and output, and digital input and output from a single slot, embedded-computer designers can use fewer boards to carry out more I/O functions. Applications include data acquisition, process control, and test and measurement. The PMC730 is equipped with a 32-bit counter-timer for use in such activities as event counting, pulse measurement, period measurement, and output waveform



generation. For integrating the module with Windows 95, 98, and ME, as well as NT and 2000 applications, Acromag has developed an ActiveX controls software package.

Acromag, Inc.
30765 South Wixom Road,
P. O. Box 437
Wixom, MI 48393-7037
Circle No. 182 on Reader Service Card



Flight Follower

DRS Hadland has brought to market its enhanced Flight Follower system that optically tracks projectiles in flight for up to 200 m of their flight path. Originally, the Flight Follower could only record projectiles that conform to normal ballistic trajectories. The new version enables programming the system to accurately track flights that do not follow conventional ballistic flight, such as rockets, rocket-assisted projectiles, rocket sledges, and many versions of smart weaponry. The enhanced Flight Follower uses a programmable scanning mirror positioned in front of a digital high-speed video camera and new software that converts the acceleration profile of an object into the correct scan profile to provide accurate tracking. The slow-motion record of a weapon in flight allows accurate diagnosis of events such as fin deployment, motor burn time, pitch, yaw, and spin rate.

DRS Hadland Ltd.
Harrow Yard, Akeman Street
Tring, Herts. HP23 6AA UK
Circle No. 183 on Reader Service Card

Imaging Spectrographs

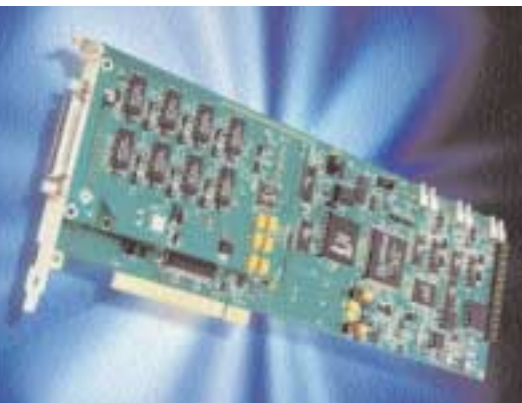
Jobin Yvon's two new imaging spectrographs have dual-array capabilities and are ideal for charge-coupled device-indium-gallium-arsenide array detector combinations. The TRIAX322 and TRIAX522 have the technical advantage that they can switch between two detectors without the need for realignment. They are available in 320- or 500-mm focal length, and the axial port offers either resolution or imaging correction. The lateral exit port is optimized for the best resolution correction. The two spectrographs offer all the innovations of the TRIAX series, including triple on-axis interchangeable grating turrets, full automation, direct digital scanning drive, and a built-in dual RS232-IEEE-488 interface for

easy control of cameras and spectrometer through SpectraMax software.

Jobin Yvon, Inc.
3880 Park Avenue
Edison, NJ 08820
Circle No. 184 on Reader Service Card

Conversion Board

Datel has issued two new 16-channel analog-digital (A-D) conversion boards with 12-bit A-D resolution that capture all input samples exactly in parallel. Its PCI-417K and PCI-417L provide simultaneous sampling at up to 600 kHz/channel.



The two boards differ by their input ranges—0 to 4.096 V for the 417K and ± 2.5 V for the 417L. Both boards include a nonstop-streaming design that collects gigabytes to memory or disk with no gaps in data, 24-bit digital input-output, up to 512 kilobits of on-board FIFO A-D memory, and two simultaneous streaming D-A waveform outputs. Each board is supplied with a Windows software system that is also available in source code as a comprehensive programming example. Typical applications include coherent phased-array sensors, sonar directional beam-formers, robotics, and multisensor platforms.

Datel, Inc.
11 Cabot Boulevard
Mansfield, MA 02048-1151
Circle No. 185 on Reader Service Card

Programmable switchers

Kepeco has added a 300-W module to its RKW series of single-output, low-noise power supplies. RKW units include a

remote on-off capability, remote voltage control from zero to maximum rated

output voltage, and a current balance terminal for easy parallel operation. They also provide single dc outputs from 3.3 to 48 V from any ac main power line of 85 to 264 V ac with active power factor connection. The modules suppress conducted and radiated emission to FCC Class B, EN 55011-B, and EN 55022-B limits with no external filtering required. RKW 300-W units measure $92 \times 80 \times 175$ mm and weigh 1.8 kg.

Kepeco, Inc.
131-38 Sanford Avenue
Flushing, NY 11352
Circle No. 186 on Reader Service Card

Cuvette Holder

Quantum Northwest has introduced the Turret 400, a compact 90-mm-diameter, four-position cuvette holder for use in many commercial fluorescence spectrometers. The Turret 400 provides rapid temperature changes and stable temperature control from -20 to $+100$ °C (± 0.02 °C). Variable-speed magnet stirring is provided under all four cuvettes. A dry-gas purge on each of the 12 optical ports limits condensation at low temperatures. A serial interface, available as an option, enables remote



computer control, and a temperature-ramping capability is programmed directly into the controller.

Quantum Northwest, Inc.
9723 West Sunset Highway
Spokane, WA 99224-9426
Circle No. 187 on Reader Service Card



Digitizer Card

Gage describes its new CompuScope 14100C board as the fastest 14-bit waveform digitizer card available for CompactPCI bus. The new version is the third in Gage's line of waveform dig-

itizers targeted to automated-test-equipment system integrators. It occupies only a single slot in a 6U form factor Compact PCI chassis, and it is fully compatible with GageScope oscilloscope software, which allows users to acquire and analyze signals without writing any programming code. Gage offers software development kits for C/C++, MATLAB, and LabView, as well as support for Windows 95, 98, and ME and Windows NT, 2000, and XP.

Gage Applied, Inc.
2000 32nd Avenue
Lachine, QC H8T 3H7 Canada
Circle No. 188 on Reader Service Card

New Software

YieldManager 4.0

EGsoft has introduced YieldManager 4.0, its hardware-free yield management program for the semiconductor industry, which is particularly useful for chip foundries fabricating 300-mm wafers. Version 4.0 includes a new user interface and navigation system, an expanded yield-analysis function, and the capability to handle new-generation data sizes, and it allows easy and secure access from a remote location using the World Wide Web. Its new graphical-analysis flow tool allows users to visually design the flow of analysis, including decision branching, and its streamlined graphical user interface provides user-friendly features such as intuitive menus.

EGsoft Division of Electroglas, Inc.
6024 Silver Creek Valley Road
San Jose, CA 95138
Circle No. 189 on Reader Service Card ■

The New Products section is based on information supplied by the manufacturers. *The Industrial Physicist* can assume no responsibility for its accuracy. To facilitate inquiries, a Reader Service Card is attached between pages 30 and 31.