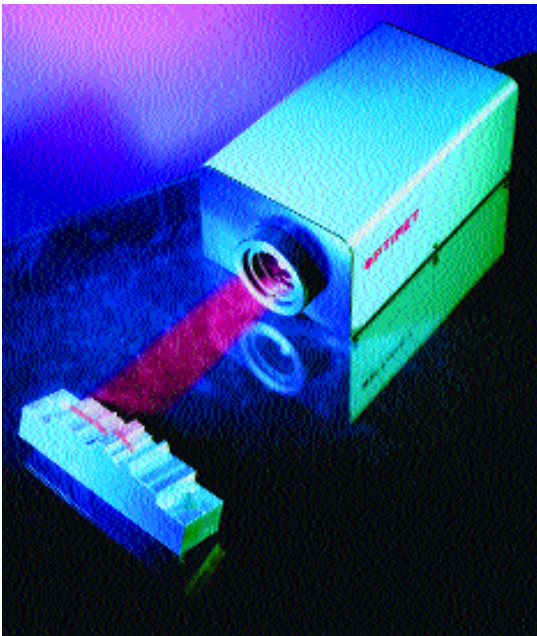


Conoscopic Holograph

Optical Metrology's new Miniconscan 3000 provides fast, accurate, three-dimensional, noncontact measurements of



metal, plastic, and rubber industrial molds, as well as machined parts and tools. Its conoscopic holographic technology allows measurements of up to 500 points/s dynamically while the stages are in motion and produces precise three-dimensional images of almost any surface. Changing the probe's lenses enables the imaging of objects from submicrometer to 200 mm in size or depth. The Miniconscan 3000 provides precision greater than 1/8,000th of the working range for most applications. Its uses include reverse engineering of parts and molds and the maintenance and repair of molds.

Optical Metrology, Inc.
9 Electronics Avenue
Danvers, MA 01923

Circle No. 180 on Reader Service Card

Optical Switching Card

Keithley Instruments has announced its new Model 7090 optical switching card, which enables optical, dc, and radio-frequency switching in one instrument. Used with Keithley's existing 7001 and 7002

switching platforms, the new card enables manufacturers of laser diodes and other optoelectronic devices to automate their test applications more effectively. The Model 7090 provides rapid switching of an optical signal among several instruments, a single instrument between multiple devices, or a combination of both. The switching card is available in both 1 × 4 and 1 × 8 switching configurations.

Keithley Instruments, Inc.
28775 Aurora Road
Cleveland, OH 44139-1891
Circle No. 181 on Reader Service Card

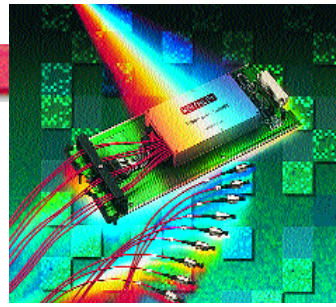
Ultrahigh-Speed Imaging

DRS Hadland has introduced Imacon 200, its latest ultrahigh-speed imaging system, which provides improved spatial and temporal data acquisition. New, high-resolution image intensifiers, coupled by optical fibers to 1,280 × 1,024-pixel charge-coupled-device (CCD) sensors, yield accurate spatial analysis of ultrafast events.



The Imacon 200's multichannel beam splitter and retriggerable CCD chip extend the number of discrete images that users can capture to 16. An optional simultaneous framing and streak-recording feature enables more powerful analysis of processes involved in complex transient events.

DRS Hadland Ltd.
Harrow Yard, Akeman Street
Tring, Hertfordshire,
England HP23 6AA
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Calibrator and Tester

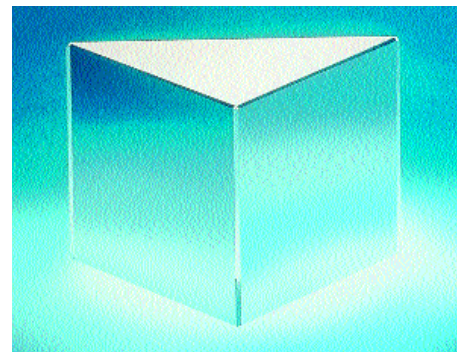
The Instrumentation Group has made available the CALYS 10 multifunction calibrator and tester from the French company AOIP. This ergonomically designed instrument is suitable for handheld use or as a bench unit in the laboratory. Its capabilities include measurement and simulation of current, temperature, dc voltage, and resistance. Other functions include relative measurements, step generation, emission-value storage of up to 100 simulation values, and memory and recall of the last 1,000 readings. The unit is useful for calibrating controls and performing on-site maintenance of temperature sensors, controllers, converters, regulators, valves, indicators, panel meters, transmitters, recorders, and other process-loop devices.



Instrumentation Group
234 Old Weaverville Road
Asheville, NC 28804-1228
Circle No. 183 on Reader Service Card

Right-Angle Mirrors

Edmund Optics has expanded its product line to include 90° mirrors with an enhanced copper coating and 90° prisms with an enhanced aluminum coating. The new mirrors have a dimensional tolerance of ± 0.1 mm, surface quality of 60-40, surface accuracy of 2 μm, angle tolerance of ± 5 arc min, and a 0.3 mm × 45° bevel. They



are designed to improve system performance by reducing alignment time. The new externally coated prisms have mirror surfaces that form a precise 90° angle, which enables users to split an image formed by a single video lens into two different cameras or combine two images onto a single camera.

Edmund Industrial Optics
 101 East Gloucester Pike
 Barrington, NJ 08007-1380
 Circle No. 184 on Reader Service Card

Fiber-Alignment Stations

Melles Griot has introduced the first model in its new series of turnkey fiber-alignment workstations. The 17 AWG 001 is an



automated system designed to optimize alignment and assembly of miniaturized optical components, such as waveguides, single or ribbon optical fibers, and other active devices. Its

features include parallel-flexure position stages for around-the-clock reliability, optical signal optimization, and high-resolution machine vision for rapid component realignment. The 17 AWG 001's software enables users to develop custom alignment algorithms quickly and easily.

Melles Griot
 55 Science Parkway
 Rochester, NY 14620
 Circle No. 185 on Reader Service Card

Photonics Test System

Newport's Model 8800 Modular photonics test system is designed for user-configured testing of passive fiber-optic components. It can be used for design verification, in-process testing, and final quality-assurance testing in a benchtop configuration or integrated with Newport's other semi- and fully automated fiber-optic component-assembly and fiber-alignment systems. Its interchangeable modules include narrow-band distributed feedback laser sources,

Fabry-Perot lasers and broadband sources, variable attenuators, wavelength meters, and free-space and fiber-optic power meters.

Newport Corp.
 1719 Deere Avenue
 Irvine, CA 92606
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Ellipsometer/Reflectometer

Philips Analytical has upgraded the manual version of its PZ2000 laser ellipsometer/



reflectometer to examine 300-mm semiconductor wafers. The tabletop measurement tool can determine the thickness, refractive indices, absorption constants, and reflectivity of thin films ranging from subnanometer to several micrometers in thickness. The PZ2000 can analyze transparent films, such as oxides, nitrides, and DL carbon, and absorbing films, including polysilicon and polyimide in production and R&D environments. Its features include multiple film capabilities, fast measurement, and simultaneous evaluation of multiple layers of thin films. The PZ2000 can measure films less than 30 Å thick with subangstrom repeatability and long-term stability.

Philips Analytical, Inc.
 12 Michigan Drive
 Natick, MA 01760
 Circle No. 187 on Reader Service Card

Spectroradiometer

Optronic Laboratories has announced the marketing of its new OL 770-LED spectroradiometer for making measurements of light-emitting diodes (LEDs), LED clusters, and LED chips. The instrument is a charge-coupled-device-based, high-speed, multichannel



instrument capable of 25 or more spectral scans/s. It can make all critical measurements of LED components, including optical power, color, and goniometry. All the components of the lightweight, compact OL 770-LED are housed in a portable container, which makes it useful in production environments. Its standard grating operates from 380 to 780 nm, and gratings are also available for ultraviolet and infrared wavelengths.

Optronic Laboratories, Inc.
 4632 36th Street
 Orlando, FL 32811
 Circle No. 188 on Reader Service Card

Nitrogen Laser

Thermo Laser Science has introduced its new 337-Sx original-equipment manufacturer nitrogen laser intended for matrix-assisted laser desorption ionization-time of flight (MALDI-TOF) mass spectrometry and other applications, such as laser microdissection and laser-based fluorescence. The laser delivers pulsed radiation at 337 nm in the ultraviolet with a repetition rate of up to 100 Hz. MALDI-TOF mass spectrometry enables the identification of proteins, and thus it can play a key role in proteomic studies in the areas of drug development, clinical diagnosis, and academic research. The company suggests the 337-Sx be used for laser-induced fluorescence detection in microbore high-performance liquid chromatography and capillary-electrophoresis separation techniques.

Thermo Laser Science
 8E Forge Parkway
 Franklin, MA 02038
 Circle No. 189 on Reader Service Card

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