

Readout Unit and Data Logger



noncontact recording of three-dimensional microstructures down to submicrometer size. The LSM 5 incorporates confocal technology using the point-scan method of high-resolution image slices, and three-dimensional image reconstruction including surface profiling, confocal optical sections, and surface topographies. The microscope's basic configuration for use in material research and industry contains a low-noise helium-neon laser and a confocal recording channel with a permanently integrated neutral beam splitter.

Carl Zeiss, Inc.
1 Zeiss Drive
Thornwood, NY 10594
Circle No. 181 on Reader Service Card

Data-Acquisition Boards

IOtech has released its new DaqBoard/2000c series of PCI boards and signal-conditioning options. The multifunction



input-output (I/O) boards are designed for industrial monitoring and test applications that require isolation, rack mounting, easy channel expansion, and high performance. The DaqBoard/2000c series consists of six data-acquisition boards with different analog and digital I/O combinations, which can be configured individually or in any combination of up to eight boards per chassis. The

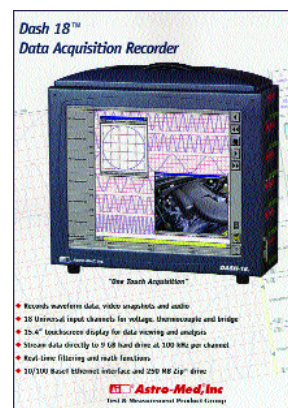
series' high-speed addressing system supports analog input expansions of up to 256 channels with scan rates of up to 5 ms/channel. The boards accommodate all I/O through a single high-density connector.

IOtech
25971 Cannon Road
Cleveland, OH 44146
Circle No. 182 on Reader Service Card

Data-Acquisition Recorder

Astro-Med has introduced its new high-speed Dash 18 data-acquisition recorder.

The briefcase-sized recorder comes equipped with a 15.4-in. color display for intuitive touch-screen control and real-time viewing and analysis of waveforms. The Dash 18 is equipped with an internal 9-GB



hard drive and 18 channels of universal inputs for voltage, thermocouple, and bridge measurements. Data can be streamed directly to the hard drive at 100 kHz/channel and subsequently reviewed with built-in analytical tools. It can also be captured and transferred to a personal

computer for later review. The Dash 18 is particularly useful for demanding applications in industry and for medical, scientific, and educational uses. Astro-Med offers a free 12-page color brochure that contains complete specifications for the Dash 18.

Astro-Med, Inc.
Astro-Med Industrial Park
West Warwick, RI 02893
Circle No. 183 on Reader Service Card

Data-Logging System

Clark's new data-logging system, the 5590 series, has programmable ALMEMO connection plugs that allow users to connect to almost any sensor and display/data

Applied Geomechanics has announced its new Ad-Visor handheld readout unit and data logger, a combination of a Handspring Visor personal digital assistant, a plug-in analog-to-digital conversion module, and Palm OS-compatible software that provides a powerful test and measurement tool. Ad-Visor displays and logs readings from any sensor with analog output, including pressure and displacement transducers, tiltmeters, and inclinometers. It also can perform digital readout and data logging from many sensors. A touch of the stylus stores project information, sensor-scale factors, and individual readings. Data stored in the Ad-Visor is easily transferred to a personal computer and integrated into spreadsheet applications.

Applied Geomechanics, Inc.
1336 Brommer Street
Santa Cruz, CA 95062
Circle No. 180 on Reader Service Card

Laser Scanning Microscope

Zeiss's compact LSM 5 Pascal confocal laser scanning microscope is designed for individual users and small work groups involved in materials research and testing. The microscope permits rapid



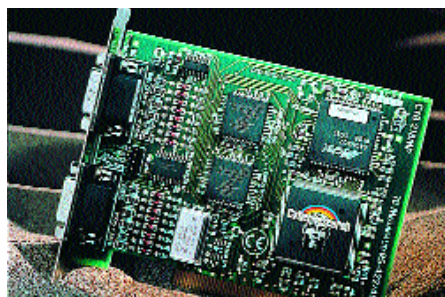


logger. The data loggers can be used strictly for data acquisition or, with optional on-board memory, to store up to 400,000 measured values. Logging can be activated manually, by preprogrammed settings with start-stop dates and times, or by limited-value overshoot that initiates logging when the monitored process exceeds operating parameters. Logging frequency is programmable from 1 s to 60 h. A wide choice of standard sensors is available, including temperature, humidity, pressure, pH, and gas concentration. The 5590 series comes in benchtop or 19-in. rack-mount styles.

E. Clark & Associates
P.O. Box 1000
Clinton, MA 01510
Circle No. 184 on Reader Service Card

High-Speed Serial Card

CyberResearch solves the communications bottleneck that occurs with industrial computers used in data-intensive control and instrumentation. Its new dual-port CYB 218MP provides communication rates from 115,000 to 18 million baud and eliminates lost data with an on-board circuit that sens-



es the beginning and end of each transmission. The CYB 218MP can send and receive data 130 times faster than a standard serial port, and each of the card's two ports can be set independently for either send-only or send-and-receive operations. Applications include the transmission of control signals

to many devices, such as industrial production lines, and the gathering of high-frequency data.

CyberResearch, Inc.
25 Business Park Drive
Branford, CT 06405
Circle No.185 on Reader Service Card

Analog Input Board

Measurement Computing has released a new ultrahigh-speed, analog input board for PCI-bus computers. The PCI-DAS 4020/12 uses four 12-bit analog inputs to acquire data at sample rates of up to 20 MHz each. An independent analog-to-digital converter on each input channel enables the board to sample all four inputs simultaneously. The plug-and-



play board has no switches, jumpers, or potentiometers on it; all board addresses and interrupt channels are set by a computer's software. It also has 24 bits of digital input-output, dual 12-bit outputs, and analog- and digital-input triggering. The board comes with Measurement Computing's InstaCal software package, a complete installation, calibration, and test program.

Measurement Computing Corp.
16 Commerce Boulevard
Middleboro, MA 02346
Circle No. 186 on Reader Service Card

Laser-Source Bank Module

ILX's newest addition to its photonic test and measurement instruments is the FOS-9200520XX, a module for use with its SSB-9200 high-density laser-source bank. Each module can be ordered with one or two lasers, and up to 50 modules can be installed in the laser-source bank for component, amplifier, and photonic-system testing. The SSB-9200 has a large TFT-VGA display, easy-to-use menu-driven front panel, and flexible

internal and external modulation capability. Options include multiplexers, a variable optical-attenuator system, and laser shutters.

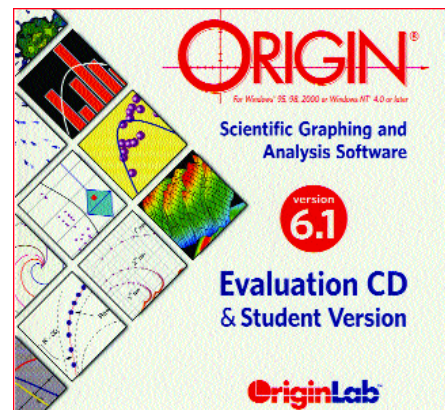
ILX Lightwave Corp.
P.O. Box 6310
Bozeman, MT 59771
Circle No. 187 on Reader Service Card

New Software

Peak-Fitting Module

OriginLab has completely redesigned its Peak Fitting Module, v. 6.1 (PFM 6.1), to provide powerful peak analysis to Origin, its Windows-based scientific graphing and analysis software. The add-on software for Origin 6.1 provides a simple, intuitive wizard interface that guides users through the entire sequence of operations, from data selection to report generation. Other features include nonlinear least-squares fitting, sophisticated automatic-baseline and peak-detection algorithms, and the ability to choose a separate peak function for each peak. PFM 6.1 is particularly helpful in areas that require analysis and modeling of data with multiple peaks.

OriginLab Corp.
1 Roundhouse Plaza
Northampton, MA 01060
Circle No. 188 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.