multiplexing (TDM), a mechanism well suited for ultralarge sensor network architecture. The FBG sensor array can also serve medium-size wavelength division multiplexer networks. The company is developing array-packaging technologies that should lead to attachable strain sensors, temperature and relative humidity sensors, and sensors for bending and distortion measurements. *QPS Photronics Inc, 217 St. Louis Avenue, Pointe Claire, Quebec, Canada H9R 5L7, http://www.qpscom.com*
See www.pt.ims.ca/7377-140

Flow meters

Hedland Flow Meters' new HTTP series portable ultrasonic transit-time flow meters clamp onto the outside of a pipe—pipe sizes can be accommodated from ½ in. and higher—and do not contact the internal liquid. The meter provides instantaneous rate and accumulated flows for efficient fluid measurement. The HTTP includes bidirectional flow capability to measure forward total, reverse total, and net total. The user communicates with the flow meter via a PC serial communications port and IR serial adapter, for the convenience of no interconnection wires; a 4- to 20-mA analog output is also offered. The company's UltraLink Microsoft Windows software is included for configuration, calibration, and troubleshooting. *Hedland Flow Meters, Division of Racine Federated Inc, 8635 Washington Avenue, Racine, WI 53406, http://www.hedland.com*
See www.pt.ims.ca/7377-141

Deformable mirror

Boston Micromachines Corp has introduced the Mini-DM, a high-resolution, MEMS deformable mirror that is ideal for adaptive optics. It is used to improve resolution in microscopes, telescopes, and ophthalmic instruments. The MEMS mirror is an advanced wavefront control device that consists of a mirror membrane supported by an underlying actuator array. Each actuator can be individually deflected electrostatically to produce the desired pattern of deformation without hysteresis. The active mirror area of the Mini-DM is deformed by 32 actuators and can reach frame rates of up to 1000 Hz. The mirror is available in segmented- or continuous-deformable versions and with an actuator stroke of 1.5, 2.5, or 3.5 μm. *Boston Micromachines Corporation, 108 Water Street, Suite 2L, Watertown, MA 02472, http://www.bostonmicromachines.com*
See www.pt.ims.ca/7377-142

Electropneumatic transducer

The 211 series electropneumatic transducers from Omega Engineering decrease a supply pressure, converting it to regulated output pressure in direct proportion to an electrical signal. The transducer accepts a wide range of supply pressures, from 0.2 bar (3 psig) above the maximum output to 6.9 bar (100 psig). An integral pneumatic volume booster provides high flow capacity—up to 12 scfm. Factory calibrated for direct-acting operation, the 211 series transducers are field reversible. If used in reverse acting mode, they require recalibration after the polarity of the signal leads is reversed. The IP211 units are current controlled (4–20 mA); the EP211 units are voltage controlled (1–5 VDC). All models can be pipe, panel, or bracket mounted. *Omega Engineering Inc, One Omega Drive, P.O. Box 4047, Stamford, CT 06907-0047, http://www.omega.com*
See www.pt.ims.ca/7377-143

Testing of laser systems

CeTaQ Americas has developed machine capability analysis (MCA) testing for lasers in medical and biomedical device manufacturing. In the testing, the system measures the width of a laser cut and the beam size and consistency, then compares the actual result with the programmed pattern and process settings. The test method is applicable to all types of lasers including UV, both excimer and diode-pumped solid-state. In laser processing, the laser head is typically stationary and the product is moved under the beam via high-precision air-bearing stages. MCA testing verifies the *x-y* accuracy of those stages and of the motion-control system, which is critical to such processing. The evaluation methodology incorporates special vision algorithms and highly accurate glass plates and components. *CeTaQ Americas, 27 Executive Drive, Hudson, NH 03051, http://www.cetaq-americas.com* ■
See www.pt.ims.ca/7377-144

Correction

May 2006, page 65—The Triad Systems Engineering ILS-7000 series of fiber-coupled laser diode systems from RPMC Lasers features optical output powers ranging from 1 W up to 100 W, with 20 W from a 100-μm-core fiber at 915 nm and 975 nm.