

Product showcase

Data acquisition

Dataforth's isolynx SLX200 data-acquisition system implements industry-standard Modbus remote telecommunication unit and transfer control protocols, enabling communication with a variety of existing third-party software drivers and human-machine interface/supervisory, control, alarm, and data-acquisition packages. The SLX200 is a modular, fully isolated system that offers improved reliability, accuracy, and isolation for a range of rugged industrial applications. Able to interface with more than 650 analog I/O modules, the SLX200 offers flexibility for factory automation, process control, test and measurement, machine control, and data-acquisition applications. Other features include support for two analog scan modes and analog input protection of 240-V ac continuous. Temperature range is -40 to +85°C, and the system operates from +5-V dc with no modules installed.



For more information, circle 100

Ratio measurements

Agilent Technologies offers total jitter (TJ) measurement capability on its bit error ratio testers, giving research and design engineers the ability to perform TJ measurements more than 40 times faster than with existing measurement solutions. Users can perform device characterization while increasing the development time of products. The technique uses a statistical algorithm that enables engineers to run TJ measurements more often. Users need to select the desired bit error ratio and the resolution accuracy. The uncertainty of the measurement is also determined and defines the significance of the result. TJ measurement is important to ensure the proper working condition of high-speed devices, according to the company; the measurement works on any jitter distribution.



For more information, circle 101

High-speed camera

The MotionXtra HG-TH from **Redlake** offers a multi-head, high-speed digital-imaging solution. The small, tethered camera heads fit into hard-to-reach locations such as under seats and in foot wells, or onto mounting surfaces. The system can feature one to four camera heads, and 2 to 8 GB of memory for up to 19.2 s of record time. Each camera head features 752 x 564 maximum resolution at 1000 frames/s, and 1000Base-T Ethernet for fast downloads. The controller and cameras withstand forces up to 100 g.



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Fine hole machine

The EDGE2 Ram electric discharge machining (EDM) machine from **Makino** offers a fine hole option with the ability to burn holes as small as 0.0012 in using tungsten rods 0.0008-in in diameter. Using 0.0008-in sapphire die guides and a high-speed spindle, length-to-diameter ratios of 10-to-1 to 15-to-1 are achievable. The EDGE2 can be converted from a fine hole function to standard Ram EDM functions in less than 5 min without changing dielectric fluid. Capable of 60-A burning, the machine is offered with an eight-, 16-, or 24-station automatic tool changer. An intelligent monitoring system measures the length of the electrode after each hole burn, and orbiting capabilities size and shape specific hole diameters to generate tapered or flared holes. Other features include a heavily ribbed, single-piece casting and heavy-duty construction as well as a mass of 6000 lb.



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Vibration test systems

Shaker systems from **Unholtz-Dickie** provide 3-in peak-to-peak stroke capability. This system allows low-frequency random transportation profiles and long-duration shock pulses to be reproduced accurately and reliably on electrodynamic shakers. The option is available with the company's 100% air-cooled R-Series shakers, rated up to 12,000 lb, and on the T2000 Series shakers, rated up to 24,000 lb.



For more information, circle 104

Code readers

In-Sight 5410 and In-Sight 5411 code readers from **Cognex** read 1-D and 2-D codes marked on parts, packages, or labels to aid with part traceability and process control applications. The In-Sight 5410 reads at line speeds in excess of 7200 parts per minute. The In-Sight 5411 offers high-resolution (1024 x 768) for a larger field to handle greater variation in the position and orientation of codes on parts and packages. The devices provide omnidirectional reading of barcodes and support codes including Code 128, Code 39, UPC, EAN, 12 of 5, and QR Code. They also deliver direct part mark reading using IDMax Data Matrix reading software based on Cognex PatMax technology. The readers achieve high throughput, even when supporting AS9132 mark quality metrics for real-time code quality analysis of dot peen marks.



For more information, circle 105