

Sensors

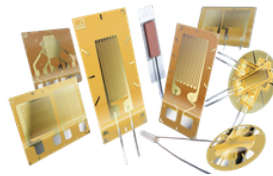
Strain Gages

Y Series - Standard in strain gage testing

- ✓ 260+ in stock for immediate delivery

M Series - High Temperature & High Fatigue
Gages -200°C to +300°C

C Series - Cryogenic gages -269°C to +250°C



Accelerometers

- ✓ IEPE Accelerometers
- ✓ MEMS Accelerometers
- ✓ Trade in discount
- ✓ Dynamic force & pressure sensors
- ✓ Calibration
- ✓ Impulse hammers
- ✓ Cable
- ✓ Stocking program



Load, Force & Torque

- ✓ Load cells
- ✓ Torque Sensors
- ✓ Multi axis sensors
- ✓ Calibration
- ✓ Instrumentation
- ✓ Wireless



Microphones

- ✓ Free-field Microphones
- ✓ Pressure Microphones
- ✓ Ultra-Thin Precision (UTP) Microphones
- ✓ Calibration
- ✓ Random Incidence Microphones
- ✓ Ear Simulators



SERVICING THE MIDWEST AND MID ATLANTIC
REGIONS SINCE 1966



330-666-8696

Pressure

High Performance

- ✓ Model 241/341 $\pm 0.05\%$ accuracy, 0-30" WC thru 8K PSI

Multipurpose

- ✓ Model 40 Series 0-30Kpsi

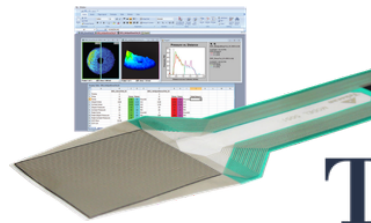
Differential Pressure

- ✓ Model 216/316 2.5" WCD thru 200 PSID $\pm 0.05\%$ FSO accuracy



Tactile Pressure, Force & Thermal Gradients

- ✓ Door Seals
- ✓ Gaskets
- ✓ Grip/Ergonomic
- ✓ Roller/NIP
- ✓ Seating/beds
- ✓ Brakes
- ✓ Tire tread/bead
- ✓ Battery



Vacuum

Thermocouple Based Vacuum Gauges

solutions since 2003 for a sustainable future.

- ✓ DV-6 Series 1 to 1000 mTorr
- ✓ DV-5 Series 0.1 to 100 mTorr
- ✓ DV-4 Series 0.1 to 20 Torr



Vacuum Transducers

- ✓ HVG-2020A 0.1 to 1000 Torr
- ✓ HVG-2020B 0.0001 to 1000 Torr
- ✓ HVG-PR 0.0001 to 1000 Torr



Flow

- ✓ Low Flow: 0-5 sccm to 0-25 SLM
- ✓ Medium Flow: 0-25 SLM to 0-1,000 SLM
- ✓ High Flow: 0-1,000 SLM to 0-2,500 SLM
- ✓ Ultra-High Flow 0-2,500 SLM to 0-15,000 SLM

- ✓ Positive Displacement - Recordall
- ✓ Turbine Flow Meter - Blancett
- ✓ Electromagnetic - ModMAG
- ✓ Mass Flow - RCT1000



Displacement

LVDT's

Low & High Temperature Sensors
-360F to 1100F

Accuracy +/-0.1% to +/- 0.5%
0.0246 inches to 37 inches

- ✓ Unguided
- ✓ Captive Guided
- ✓ Spring Return



Eddy Current Sensors

High Temperature Sensors 1000F
0.002 inches (50 micro) - 0.750 inch (20mm)
0.5% to 0.25% Accuracy

Lasers

Dimetix Laser Sensors

- ✓ Up to 500m range with up to 1mm accuracy
- ✓ Measurement rates up to 250Hz
- ✓ -40°C up to +60°C, rugged IP65 enclosure

Inertial Sensors

From raw IMUs to GNSS/INS, inertial sensors provide the motion and orientation for robotics, navigation, and autonomous systems.

- ✓ IMUs - raw acceleration & angular rate
- ✓ VRU - Pitch, Roll & Yaw
- ✓ AHRS - integrates multi-axis, accelerometers, gyroscopes & magnetometers



Non-Contact Capacitive Sensors

High Temperature Sensors 1600F
0.05% - 0.1% Accuracy
0.004 inches (100 microns) - 0.5 inch (12mm)

- ✓ Gap
- ✓ Bore Gauges
- ✓ Parallelism
- ✓ Density
- ✓ Digital feeler gage
- ✓ Slot Die Gap



- ✓ Position
- ✓ Displacement
- ✓ Parallelism



Crane Sentry

- ✓ Crane to Crane/Crane to Wall collision detection
- ✓ Zone Control, No Fly Zone
- ✓ Hoist Side Pull detection



Temperature

- ✓ RTD
- ✓ Thermocouples
- ✓ Industrial Probes
- ✓ Custom design probes



Digital Image Correlation

State-of-the-art non intrusive Digital Image Correlation (DIC) optical tool for shape, strain, and deformation analysis of solid, granular and liquid subjects.



3D CSI Optical Profilers

- ✓ Non-contact surface measurement and characterization for metrology
- ✓ Topography, waviness, roughness, and microstructure
- ✓ Ultra-smooth to rough 3D printed samples
- ✓ up to 2 million data points/sec
- ✓ Constant sub-nanometer vertical precision



Torque & Force Testers

HelixaPro & VortexPro 0 to 90 lbf-in

- ✓ Semi Automated - VectorPro Software
- ✓ PC or Console driven

VortexdV- 0-90lbf-in

- ✓ Motorized torque tester
- ✓ Digital torque meter
- ✓ VectorPro Lite software

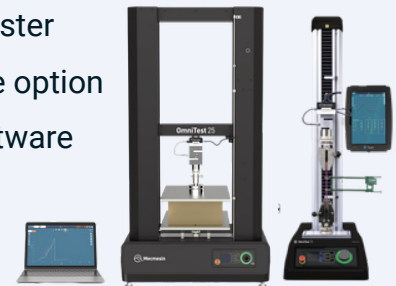


OmniTest - 5kN, 7.5kN, 10kN, 25kN, 50kN

- ✓ Software controlled VectorPro Software
- ✓ PC or Console driven

Multi-Test-dV - 0.5kN, 1kN, 2.5kN

- ✓ Motorized force tester
- ✓ Digital force gauge option
- ✓ VectorPro Lite software



Custom Test Stands

- ✓ Fatigue, strength & durability testing
- ✓ Machine Controls Retrofits
- ✓ Servo-Hydraulic Test Equipment
- ✓ Pneumatic Test Equipment
- ✓ InnControl modular software suite
- ✓ Structural Test System Retrofits



Hydraulic Test Products

- ✓ Compact hydraulic actuator construction
- ✓ High Stability & rigidity
- ✓ High speeds & frequencies
- ✓ Efficient for varying test series
- ✓ Fast lead time



Vehicle Dynamics Sensors

Optical inertial measurement sensors

- ✓ Vehicle Speed
- ✓ Acceleration
- ✓ Sideslip
- ✓ Angular Rate
- ✓ Pitch & Roll
- ✓ Angle



**Sensoric
Solutions**

- ✓ Braking
- ✓ 1khz sample rate
- ✓ Trigger, sync, TTL output



Vibration Testing

ED Shakers

I Series - 11Klbf - 35,200lbf - Solid Armature

H Series - 17,600lbf - 44klbf

LS Series - 4,400lbf - 15Klbf

M Series - 2,200lbf - 11Klbf

L Series - 440lbf - 1320lbf



- ✓ Head expanders
- ✓ Slip tables
- ✓ Slip-in-slip
- ✓ Shaker Service & PM on any brand shakers



Environmental Chambers

AGREE Chamber - for Vibe & Thermal testing

Temperature & Humidity

Fast Temperature & Humidity

Walk in Climate Test Chambers

Thermal Shock Chambers

High Temperature Chambers

Altitude Chambers

Thermal Vacuum Chambers



Laser Vibrometers

Non Contact Vibration Measurement

- ✓ Single Point & Full Field/Scanning Systems
- ✓ Universities, R&D, & EOL Production Testing
- ✓ 0Hz-8Ghz frequency bandwidth
- ✓ Microscopic & Large-scale Applications
- ✓ Velocity, Displacement, Acceleration, Strain
- ✓ Few mm to >500 stand-off distance

VibroGo



VibroFlex



VibroScan QTec

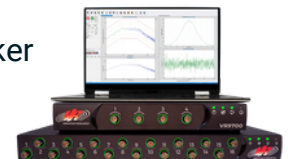


Vibration Controllers

VR9700 - Vibration Controller up to 128 Channels

VR10500 - Vibration Controller up to 512 Channels

- ✓ 256kHz Sample rate
- ✓ Compatible with any shaker
- ✓ Mix & match hardware



ObserVR1000 - Signal Analysis Hardware

- ✓ 16-128 Channels
- ✓ 6+ hr battery
- ✓ 128K Hz Sample Rate
- ✓ GPS



Data Acquisition, Instrumentation & Wireless

Gantner
instruments



DIN Rail



19" System , 3U



Portable System



- ✓ Powerful signal conditioning with flexibility in interface & enclosure
- ✓ High data rate 100Khz
- ✓ Supports all input types
- ✓ Modern API for Configuration & data access
- ✓ Shared dashboards allow easy remote monitoring of data
- ✓ CAN, Modbus, EtherCAT, Profinet with on/off-site server and/or cloud storage
- ✓ 500VDC isolation channel to channel, channel to power, channel to buss
High Voltage modules with +/-1500VDC isolation, +/-2500VDC Galvanic Isolation
- ✓ Distributed & Daisy Chained set up



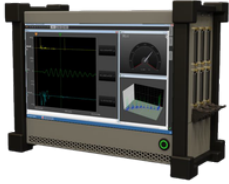
- ✓ High Channel Density 10K+
- ✓ Up to 2 Million samples/s
- ✓ Zero Latency digital I/O Capabilities
- ✓ Supports all input types
- ✓ Low Noise Multi-Filtering



Wireless Data Sensor Strain & Vibration

- ✓ 1-2 Channels
- ✓ 0.125 to 8Khz Sample rate
- ✓ 1000m RF Range
- ✓ +/-0.025% Sensitivity
- ✓ Analog, digital or CAN outputs

Hi-Techniques



- ✓ High Resolution DAQ/DSO/FFT Analyzer
- ✓ Cutting-edge COTS-PC with linux-OS, NVMe-SSHD
- ✓ Up to 2 Million samples/s 24bit SAR
- ✓ Supports all input types
- ✓ Recorder, Scope, Spectral, modal & combustion analyzer



- ✓ -40 to 85C Operating Temperature
- ✓ Up to 1 Million samples/s
- ✓ IP-67
- ✓ 100G shock
- ✓ Supports all input types



- ✓ 20k hz samples/s
- ✓ 100G shock
- ✓ Universal Inputs

- ✓ -40 to 85C
- ✓ IP-67

interface

FORCE MEASUREMENT SOLUTIONS.



- ✓ Digital Displays
- ✓ Hand Held Meters
- ✓ Data Acquisition
- ✓ Signal conditioning
- ✓ Wireless
- ✓ USB output

Mantracourt®



- ✓ Wireless Telemetry
- ✓ Signal conditioning
- ✓ OEM Products
- ✓ Bluetooth Telemetry
- ✓ Sensor Displays
- ✓ ATEX Certified

MicroStrain by HBM

HOTTINGER BRÜEL & KJÆR

Sensor Inputs



Wireless Nodes



Gateways



Software



OEM Products & Contract Manufacturing



- ✓ PCB-level differential, absolute, and gauge pressure sensors for medical, HVAC, and industrial systems
- ✓ Built on NimbleSense™ System-in-a-Sensor architecture for ultra-low noise and high accuracy
- ✓ Multi-Range technology enables up to 8 calibrated pressure ranges per device
- ✓ Ideal for high-resolution, fast-response applications like ventilators, CPAP, HVAC flow control, and automation



- ✓ Advanced-level, quality, and touch sensors are tailored for medical, appliance, industrial, and mobility applications.
- ✓ Encoders, rotary switches, and customizable buttons are designed to meet specific customer needs.
- ✓ Customized solenoids engineered for various industrial and automotive requirements.



- ✓ Wire Harnesses, Cables & Assemblies
- ✓ Molded Deutsch & Amphenol
- ✓ Custom Molding
- ✓ Box Builds
- ✓ Engineering Excellence, Multi-Tier Sourcing, Flexible & Responsive



Global Contract Manufacturers and Product Design Engineers:

- ✓ Designers and manufacturers of electrical and mechanical assemblies.
- ✓ Supply chain, Quality, & Project Management



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Business Card Here