



# WHAT'S NEW AT DYTRAN

**PIEZOELECTRIC AND DC SENSORS  
FOR THE TEST PROFESSIONAL**  
Vibration, Shock, Structural Dynamics,  
Dynamic Force and Pressure

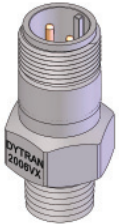


**2009**



2006V

### Dynamic Pressure Sensors



#### Features

- Available in ranges of 50 psi, 100 psi and 500 psi
- 2-pin Mil-C-5015 connector
- ¼-28 MNPT mounting
- Housing electrically isolated from power ground
- Hermetically sealed
- Stainless steel construction (316L SS)

#### Benefits

- IEPE
- Fast response time
- Convenient pipe thread mount
- Robust military connector
- Simple IEPE wiring configuration
- Acceleration compensation

#### Potential Applications

- Industrial pressure pulsations
- Pipeline leak detection
- Industrial acoustic studies

3092C

### Ultra High Temperature Accelerometer



#### Features

- +900° F operation
- 3.5 pC/g sensitivity
- 10-32 mounting hole
- 10-32 electrical connector
- Hermetically sealed
- Stainless steel construction
- Charge mode

#### Benefits

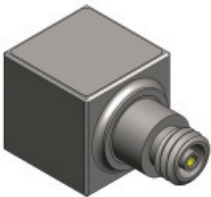
- High temperature operation
- No internal electronics required, self generating, increases MTBF

#### Potential Applications

- General purpose ultra high temperature vibration measurements
- Automotive - engine / exhaust analysis
- Turbine engine vibration monitoring

3097A

### Miniature Single Axis Cubic Accelerometers



#### Features

- Unique cubic design
- Available in sensitivities of 10 mV/g, 100 mV/g and 500 mV/g
- 5-40 mounting hole
- 10-32 electrical connector
- Hermetically sealed
- Titanium construction
- Low noise electronics

- Wide bandwidth
- TEDS available
- IEPE

#### Benefits

- Mounts from 4 sides
- Easy to apply and remove from test structure

#### Potential Applications

- Modal analysis
- Noise, vibration and harshness (NVH)
- Hand / arm vibration measurements
- Squeak & Rattle
- General purpose vibration

3099A

### Filtered Shock Accelerometers

**Coming Soon**



#### Features

- Available in ranges of 25,000, 50,000, and 75,000g
- ¼-28 mounting stud
- 10-32 electrical connector
- Case isolated
- Titanium construction
- Very high natural frequency

- Mechanically and electrically filtered
- IEPE

#### Benefits

- Broad frequency response
- Field replaceable cable
- Filter removes unwanted high frequency data and eliminates zero shift

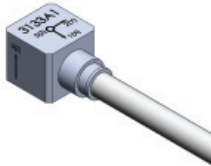
#### Potential Applications

- Drop / shock testing
- Far field blast testing
- Pyrotechnic testing

**Coming  
Soon**

**3133A**

### Ultra Miniature Triaxial Accelerometers



**Features**

- Ultra miniature triaxial design
- Available in sensitivities of 2 mV/g, 5 mV/g and 10 mV/g
- 0.8 grams
- Adhesive mount
- Integral cable
- Titanium construction

- High temperature operation

**Benefits**

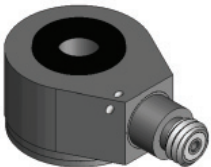
- IEPE
- Minimal mass loading
- Ultra low profile

**Potential Applications**

- Environmental stress screening (ESS)
- PC board vibration measurements
- Product response
- General purpose triaxial vibration measurements where space is at a premium
- Mechanical shock

**3215M1**

### Low Profile Through Hole Accelerometer



**Features**

- Low profile ring style design
- 10 mV/g sensitivity
- 10-32 mounting stud
- 10-32 side exit connector
- Hermetically sealed
- Titanium construction
- Ultra stable quartz sensing element

- Lock wire hole

**Benefits**

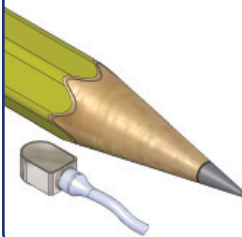
- IEPE
- 360° connector orientation
- Excellent where vertical clearance is limited
- Can be used on aircraft
- Ultra stable over broad temperature range

**Potential Applications**

- Aircraft vibration measurements where a low profile and size are important
- Shaker control
- Environmental stress screening (ESS)

**3224A**

### Ultra Miniature Tear Drop Accelerometers



**Features**

- Ultra miniature design
- Available in sensitivities of 2 mV/g and 10 mV/g
- 0.2 grams
- Adhesive mount
- Integral cable
- High temperature operation
- IEPE

**Benefits**

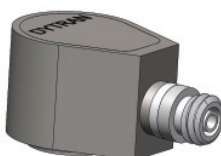
- Minimal mass loading
- Ultra low profile

**Potential Applications**

- Environmental stress screening (ESS)
- PC board vibration measurements
- Product response
- General purpose vibration where space is at a premium
- Mechanical shock

**3225M23  
3225M24**

### Miniature High Sensitivity Tear Drop Accelerometers



**Features**

- Ultra miniature tear drop design
- Available in sensitivities of 50 mV/g and 100 mV/g (lower sensitivities available upon request)
- 1.0 gram
- Adhesive mount
- Hermetically sealed

- Removable cable
- Titanium construction
- Low noise electronics
- TEDS available
- IEPE

**Benefits**

- Minimal mass loading
- Ultra low profile
- Able to measure low level signals

**Potential Applications**

- Modal analysis
- Environmental stress screening (ESS)
- PC board vibration measurements
- Product response
- General purpose vibration where space is at a premium
- Mechanical shock

3232A

### Biaxial Accelerometer with Integrated Mounting Bracket



#### Features

- Biaxial
- 100 mV/g sensitivity (2 orthogonal axes)
- Integrated mounting bracket
- Integrated multi-pin military connector
- Hermetically sealed
- Stainless steel construction
- Case isolated

#### Benefits

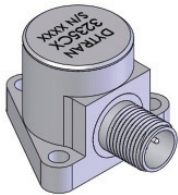
- IEPE
- No separate mounting bracket required
- Reduced mass
- Cost savings

#### Potential Applications

- Health and usage monitoring systems (HUMS)
- Active vibration control (AVC)
- Rotor, track and balance (RTB)
- General purpose biaxial vibration measurements

3235C

### High Temperature Differential Accelerometers



#### Features

- +500° F operation
- Available in sensitivities of 50 pC/g, 100 pC/g and 200 pC/g
- 3-bolt pattern mount
- 2-pin electrical connector
- Stainless steel construction
- Charge mode

#### Benefits

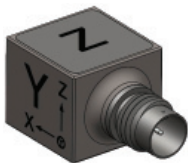
- Low noise operation in differential mode
- Industry standard tri-bolt mount
- Continuous high temperature operation

#### Potential Applications

- High temperature turbine engine vibration measurements
- High temperature industrial monitoring

3263M8

### Miniature Triaxial Accelerometer



#### Features

- Ultra low noise operation
- 100 mV/g sensitivity
- 5.6 grams
- 4-40 mounting hole
- Single 4-pin connector
- Hermetically sealed
- Titanium construction
- 0.3 Hz low end frequency response

- X, Y, Z axes identification
- IEPE

#### Benefits

- Excellent phase response at low frequencies
- Minimal mass loading
- Excellent signal to noise ratio

#### Potential Applications

- Modal analysis
- General test and measurement
- Shaker control
- Squeak & Rattle
- Noise, vibration and harshness (NVH)

3273A

### Miniature Triaxial Accelerometers



#### Features

- Ultra low noise operation
- Available in sensitivities of 10 mV/g, 50 mV/g and 100 mV/g
- 2.7 grams
- Adhesive mount
- Single 4-pin connector
- Hermetically sealed
- Titanium construction

- 0.31 Hz low end frequency response
- X, Y, Z axes identification
- IEPE

#### Benefits

- Excellent phase response at low frequencies
- Minimal mass loading
- Excellent signal to noise ratio

#### Potential Applications

- Modal analysis
- General test and measurement
- Shaker control
- Squeak & Rattle
- Noise, vibration and harshness (NVH)

5334

### High Temperature Vibration Measurement System



#### Features

- Ultra high temperature operation, +900° F
- 10 mV/g sensitivity (other sensitivities available upon request)
- 3-bolt pattern mount
- Integrated hard line cable assembly
- Case isolated

- Hermetically sealed
- Stainless steel construction
- Integrated differential amplifier
- Low profile
- IEPE

#### Benefits

- Integrated cable allows for ultra high temperature operation
- Easily powered by IEPE data acquisition systems

- Industry standard tri-bolt mount

#### Potential Applications

- Aircraft turbine vibration measurements
- Industrial turbine vibration measurements
- Ultra high temperature general purpose vibration measurements

7500A

### High Performance Variable Capacitance Accelerometers



#### Features

- Micro machined MEMS technology
- Available in ranges from 2g to 200g
- Two #4 or M3 screws for mounting
- 4-pin connector
- Hermetically sealed

- Rugged titanium construction
- High temperature operation up to +125° C
- Operates from +9 VDC to +32 VDC
- Low profile

#### Benefits

- Can be used to measure linear acceleration, dynamic acceleration and tilt

- Measures vibration frequencies down to DC (static)

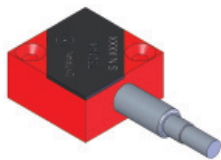
- Ultra low noise

#### Potential Applications

- Crash testing
- Airbag testing
- Robotics
- Seismic monitoring
- Tilt measurement

7521A

### Single Axis Variable Capacitance Accelerometers



#### Features

- Small footprint
- Available in ranges from 2g to 200g
- Sturdy mount utilizing two M2 screws
- Integral cable
- Broad operating temperature range
- Low mass

- 5 VDC operation
- DC response

#### Benefits

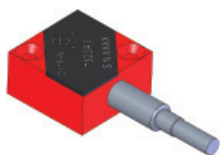
- Cost effective solution for general purpose uses
- Measures vibration frequencies down to DC (static)
- Minimal mass loading due to lightweight construction

#### Potential Applications

- Crash testing
- Airbag testing
- Robotics
- Seismic monitoring
- Tilt measurement
- Ride dynamics

7523A

### Triaxial Variable Capacitance Accelerometers



#### Features

- Small footprint
- Available in ranges of 2g and 50g
- Sturdy mount utilizing two M2 screws
- Integral cable
- Broad operating temperature range
- Low mass

- 5 VDC operation
- DC response

#### Benefits

- Three axis measurement in one compact package
- Measures vibration frequencies down to DC (static)
- Minimal mass loading due to lightweight construction

#### Potential Applications

- Crash testing
- Air bag testing
- Robotics
- Seismic monitoring
- Tilt measurement
- Ride dynamics

signal conditioners

impulse hammers

accelerometers

cables

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