

VIBRATION  
SENSORS for  
AEROSPACE  
TESTING

**measurement**  
SPECIALTIES

*Sensors for Dynamic Measurement*



Vibration & Shock Sensors for HUMS and  
Flight Testing Applications

# PIEZOELECTRIC Accelerometers

## Model EGPE-1C

- Health Usage Monitoring Systems (HUMS)
- Internally Shielded, Case Isolated
- Stable Temperature Response
- Integral Cable with Welded Strain Relief
- -55°C to +150°C Temperature Range
- ±50g to ±500g Dynamic Ranges
- 0.6Hz to 15,000Hz Frequency Response



## Model EGPE-1D

- Health Usage Monitoring Systems (HUMS)
- Internally Shielded, Case Isolated
- Popular Through-Hole Mount
- 3-pin Connector Interface
- -55°C to +150°C Temperature Range
- ±50g to ±500g Dynamic Ranges
- 0.6Hz to 15,000Hz Frequency Response

## Model EGPE-1A

- Gearbox Monitoring
- Isolated Mounting Surface
- Hermetically Sealed
- Annular Shear Mode Crystal
- -55°C to +150°C Temperature Range
- ±10g to ±500g Dynamic Ranges
- 0.1Hz to 12,000Hz Frequency Response



## Model EGPE-2A

- High Temperature Monitoring
- Charge Mode Accelerometer
- Hermetically Sealed
- Annular Shear Mode Crystal
- -55°C to +260°C Temperature Range
- ±50g to ±2000g Dynamic Ranges
- 0.1Hz to 15,000Hz Frequency Response



## Model EGPE-1P

- Health Usage Monitoring Systems (HUMS)
- Internally Shielded, Case Isolated
- Popular Through-Hole Mount
- 3-pin Connector Interface
- -55°C to +150°C Temperature Range
- ±50g to ±500g Dynamic Ranges
- 0.6Hz to 15,000Hz Frequency Response



# MEMS DC Accelerometers

## Model 4630

- Low Frequency Triaxial DC Measurements
- Signal Conditioned Output
- Low Power Consumption
- Teflon Jacketed Cable
- -40°C to +115°C Temperature Range
- ±2g to ±500g Dynamic Ranges
- DC to 1500Hz Frequency Response



## Model 4610

- Fatigue & Structural Testing
- Payload Vibrations
- Advanced Thermal Compensation
- 10,000g Shock Protection
- -40°C to +115°C Temperature Range
- ±2g to ±500g Dynamic Ranges
- DC to 1500Hz Frequency Response



## Model 3801A and 4801A

- 3801A: mV Output for Impact & Shock Testing
- 4801A: Amplified Output for Structural Testing
- Detachable Cable Assembly
- Welded Hermetic Construction, Stud Mount
- -55°C to +125°C Temperature Range
- ±2g to ±2000g Dynamic Ranges
- DC to 4000Hz Frequency Response



## Model 4620

- Structural Dynamics & Modal Analyses
- Low-pass Filtered Output
- Integral Rugged Strain Relief
- FEP Jacketed Cable
- -55°C to +125°C Temperature Range
- ±2g to ±250g Dynamic Ranges
- DC to 1000Hz Frequency Response



## Model 4602

- Flight & Flutter Testing
- Signal Conditioned Output
- Active Temperature Compensation
- Hermetically Sealed Sensor Assembly
- -55°C to +125°C Temperature Range
- ±2g to ±500g Dynamic Ranges
- DC to 2000Hz Frequency Response



Measurement Specialties offers reliable, advanced vibration and shock technologies for flight testing applications. These technologies include Silicon MEMS for static and dynamic measurements and Piezoelectric for high frequency and high temperature applications.

With over 20 years of experience manufacturing accelerometers for demanding applications, Measurement Specialties provides customers with high quality and cost-effective sensing solutions.

### Key Applications:

- Flight Testing
- Structural Dynamics
- Health Usage Monitoring Systems (HUMS)
- Flutter Testing
- Fatigue Testing
- Gearbox Monitoring

## Customer Satisfaction

Measurement Specialties is committed to exceeding the needs and expectations of our customers and to continually improve upon our business objectives which include:

- Quality Performance
- On-time Delivery
- Product & Process Performance
- Customer Satisfaction Surveys
- Internal Audit Results
- Competitive Pricing
- Fast Response
- Custom Tailored Solutions

### Certifications:

ISO9001, ISO14001, AS9100, ISO13485, TS16949, ESA/NASA, FDA/CE-MDD



## FREE Measurement Handbook!

Easy to get...log on to [www.measvibration.com/handbook](http://www.measvibration.com/handbook)

### Key Features:

- Loaded with engineering information
- Compact and easy to carry
- Useful tables and formulas

### Measurement Specialties, Inc.

Vibration Sensors Design Center

32 Journey, Suite 150

Aliso Viejo, CA 92656

Web: [www.meas-spec.com](http://www.meas-spec.com)

- Global Headquarters, 1000 Lucas Way, Hampton, VA 23666, USA,
- European End-User Products Headquarters, 26 Rue des Dames, F78340 Les Clayes-sous-Bois, France,
- Asian Headquarters, Measurement Specialties (China), Ltd., F1.6-4D, Tian An Development Compound, Shenzhen, 518048, China,