

# VIBRATION SENSORS

TE has spent more than 20 years designing and manufacturing accelerometers based on our proprietary Microelectromechanical System (MEMS), bonded gage and piezoelectric ceramic/film technologies. Voltage mode piezoelectric is the most popular accelerometer design due to its high level output and wide bandwidth. We offer voltage mode accelerometers in the traditional 3-wire or 2-wire (IEPE) configurations. Charge mode piezoelectric accelerometers measure shock and vibration in high temperature environments. In addition to its high temperature operating capability when used with a high quality charge amplifier, a charge mode accelerometer offers dynamic range scalability. To measure motion (velocity, displacement) accurately, an accelerometer or with DC response is required. Incorporating MEMS technologies and the latest analog and digital ASICs, our DC accelerometers offer high performance and exceptional value. All products are EAR99 and RoHS compliant.



## MEMS DC ACCELEROMETERS

Embedded



**MEAS 3022, 3028**

<b>Package</b>	Pins or pads
<b>Type</b>	Board level
<b>FS Range (g)</b>	±2, 5, 10, 20, 50, 100, 200
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• mV output</li> <li>• Gas damping</li> <li>• Pin or pad option</li> </ul>
<b>Accuracy</b>	±0.5% non-linearity
<b>Operating Temp.</b>	-40°C to 125°C
<b>Dimensions (mm)</b>	22.86 x 15.24 x 5.33
<b>Typical Applications</b>	Vibration and shock monitoring, tilt applications, motion control, impact testing



**MEAS 3052A, 3058A**

<b>Package</b>	Pins or pads
<b>Type</b>	Board level
<b>FS Range (g)</b>	±2, 5, 10, 20, 50, 100
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Temperature compensated</li> <li>• Gas damping</li> <li>• Pin or pad option</li> </ul>
<b>Accuracy</b>	±0.5% non-linearity
<b>Operating Temp.</b>	-40°C to 125°C
<b>Dimensions (mm)</b>	22.86 x 15.24 x 5.33
<b>Typical Applications</b>	Vibration and shock monitoring, tilt applications, motion control, impact testing



**MEAS 3038**

<b>Package</b>	SMD
<b>Type</b>	Board level
<b>FS Range (g)</b>	±50, 100, 200, 500, 2000, 6000
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Hermetically sealed</li> <li>• High over-range protection</li> <li>• Gas damping</li> </ul>
<b>Accuracy</b>	±0.5% non-linearity
<b>Operating Temp.</b>	-54°C to 125°C
<b>Dimensions (mm)</b>	7.62 x 7.62 x 3.3
<b>Typical Applications</b>	Vibration and shock monitoring, embedded systems, shock testing, safe and arm



**MEAS 3255A**

<b>Package</b>	SMD
<b>Type</b>	Board level
<b>FS Range (g)</b>	±25, 50, 100, 250, 500
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Self test enabled</li> <li>• Gas damping</li> <li>• Bidirectional mounting</li> </ul>
<b>Accuracy</b>	±1.0% non-linearity
<b>Operating Temp.</b>	-40°C to 125°C
<b>Dimensions (mm)</b>	13.46 x 7.62 x 3.81
<b>Typical Applications</b>	Vibration and shock monitoring, aerospace testing, impact testing, transportation

## PIEZOELECTRIC ACCELEROMETERS

Embedded Single Axis



**MEAS 805, 805M1**

<b>Package</b>	TO - 5
<b>Type</b>	Adhesive (Stud mount option)
<b>FS Range (g)</b>	±50, 500 / ±20, 200
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Hermetically sealed</li> <li>• Case grounded design</li> <li>• Bandwidth to 12 kHz</li> </ul>
<b>Accuracy</b>	±1.0% non-linearity
<b>Operating Temp.</b>	-50°C to 100°C
<b>Dimensions (mm)</b>	Ø8.9 x 10.16
<b>Typical Applications</b>	Machine monitoring, data loggers, permanent structures



**MEAS 808, 808M1**

<b>Package</b>	TO - 8
<b>Type</b>	Adhesive (Stud mount option)
<b>FS Range (g)</b>	±10, 50 / ±4, 20
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Hermetically sealed</li> <li>• Case grounded design</li> <li>• Bandwidth to 8 kHz</li> </ul>
<b>Accuracy</b>	±1.0% non-linearity
<b>Operating Temp.</b>	-50°C to 100°C
<b>Dimensions (mm)</b>	Ø15.2 x 16.6
<b>Typical Applications</b>	Machine monitoring, data loggers, embedded applications



**MEAS 810M1**

<b>Package</b>	Board level
<b>Type</b>	SMD
<b>FS Range (g)</b>	±25, 100
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Small size, low cost</li> <li>• Dynamic response</li> <li>• 6 kHz bandwidth</li> </ul>
<b>Accuracy</b>	±2.0% non-linearity
<b>Operating Temp.</b>	-40°C to 125°C
<b>Dimensions (mm)</b>	12.70 x 15.24
<b>Typical Applications</b>	Data logging, impact detection



**MEAS LDTC Family**

<b>Package</b>	Piezo film elements with or without mass and pins
<b>Type</b>	Cantilever beam with vertical or horizontal pins
<b>FS Range (g)</b>	±10 (Typical)
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Very low cost</li> <li>• High sensitivity (1 V/g)</li> <li>• Ultra-low power (Self generating)</li> </ul>
<b>Accuracy</b>	±20.0% (Typical)
<b>Operating Temp.</b>	-40°C to 70°C
<b>Dimensions (mm)</b>	19.05 x 6.35 x 6.35
<b>Typical Applications</b>	Wake-up switch, load imbalance, anti-theft devices, impact sensing, vital signs monitoring

## PIEZOELECTRIC ACCELEROMETERS

Embedded Triaxial



### MEAS 832, 832M1

Package	SMD
Type	Board mount
FS Range (g)	±25, 50, 100, 200, 500
Unique Features	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Hermetically sealed</li> <li>• Piezo-ceramic</li> </ul>
Accuracy	±2.0% non-linearity
Operating Temp.	-20°C to 80°C (832) -40°C to 125°C (832M1)
Dimensions (mm)	18.8 x 14.22 x 4.32
Typical Applications	Data logging, asset monitoring, impact monitoring



### MEAS 834, 834M1

Package	SMD
Type	Board mount
FS Range (g)	±2000, 6000
Unique Features	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Hermetically sealed</li> <li>• Piezo-ceramic</li> </ul>
Accuracy	±2.0% non-linearity
Operating Temp.	-20°C to 80°C (834) -40°C to 125°C (834M1)
Dimensions (mm)	18.8 x 14.22 x 4.32
Typical Applications	Data logging, asset monitoring, impact monitoring

## DC ACCELEROMETERS

Plug and Play, Unamplified



### MEAS 40A, 40B

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±25, 100, 250, 500, 1000, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Critically damped</li> <li>• SAE J211 / 2570 compliant</li> <li>• Compact</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-20°C to 80°C
Dimensions (mm)	16.7 x 10.0 x 5.0
Typical Applications	In-dummy and pedestrian crash testing



### MEAS 52F

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±50, 200, 500, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Gas damping</li> <li>• Over-range stops</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 90°C
Dimensions (mm)	11.2 x 10.2 x 3.8
Typical Applications	Vibration and shock monitoring, shock testing, safety impact testing, side-impact testing



### MEAS 52, 52M30

Package	Plastic / anodized aluminum
Type	Adhesive mount
FS Range (g)	±50, 200, 500, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Gas damping</li> <li>• Over-range stops</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 90°C
Dimensions (mm)	9.65 x 4.83 x 3.3
Typical Applications	Vibration and shock monitoring, shock testing, safety impact testing, side-impact testing

## DC ACCELEROMETERS

Plug and Play, Unamplified



### MEAS 64B, 64C

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±50, 100, 200, 500, 2000, 6000
Unique Features	<ul style="list-style-type: none"> <li>• SAE J211 / 2570 compliant</li> <li>• Flexible, rugged cable</li> <li>• Over-range stops</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 121°C
Dimensions (mm)	12.19 x 4.83 x 4.83
Typical Applications	In-dummy crash and impact testing



### MEAS 58

Package	Anodized Aluminum
Type	Adhesive mount
FS Range (g)	±50, 100, 200, 500, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Low noise cable</li> <li>• Small package</li> <li>• Light weight</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-20°C to 85°C
Dimensions (mm)	14.0 x 6.35 x 6.35
Typical Applications	Crash testing, impact testing, off road testing



### MEAS 1201, 1201F

Package	Anodized aluminum
Type	Adhesive / screw mount
FS Range (g)	±50, 100, 200, 500, 1000
Unique Features	<ul style="list-style-type: none"> <li>• Small size</li> <li>• Flexible, rugged cable</li> <li>• Over-range stops</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-20°C to 85°C
Dimensions (mm)	8.89 x 8.89 x 9.4
Typical Applications	On-vehicle crash and impact testing, vibration and shock monitoring



### MEAS 3801A

Package	Stainless steel
Type	Stud mount
FS Range (g)	±2, 10, 20, 50, 100, 200, 500, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Hermetically sealed sensor</li> <li>• Gas damping</li> <li>• 10,000 g over-range protection</li> </ul>
Accuracy	±0.5% non-linearity
Operating Temp.	-54°C to 121°C
Dimensions (mm)	15.88 x 15.24
Typical Applications	Impact testing, structural testing, test and instrumentation, environmental testing



### MEAS 3700

Package	Stainless steel
Type	Screw mount
FS Range (g)	±50, 200, 500, 2000, 6000
Unique Features	<ul style="list-style-type: none"> <li>• No zero shift</li> <li>• mV output</li> <li>• 20,000 g over-range protection</li> </ul>
Accuracy	±2.0% non-linearity
Operating Temp.	-54°C to 121°C
Dimensions (mm)	14.22 x 8.13 x 3.81
Typical Applications	Impact and shock testing, structural testing, drop testing, aerospace testing



### MEAS EGAXT

Package	Stainless steel
Type	Adhesive / screw mount
FS Range (g)	±5 through 2500
Unique Features	<ul style="list-style-type: none"> <li>• Sub-miniature</li> <li>• Lightweight</li> <li>• 10,000 g over-range protection</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 120°C
Dimensions (mm)	7.2 x 4.6 x 4.6
Typical Applications	Flight test and control, launch, crash, impact testing, robotics



### MEAS EGCS-D0, EGCS-D1S

Package	Stainless steel
Type	Screw / stud mount
FS Range (g)	±5 through 10,000
Unique Features	<ul style="list-style-type: none"> <li>• Rugged housing</li> <li>• Critically damped</li> <li>• 10,000 g over-range protection</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 120°C
Dimensions (mm)	D0: 19.05 x 19.05 x 7.62 D1S: 12.7 x 12.7 x 15.24
Typical Applications	General purpose, machine control, destructive testing, engine testing



### MEAS EGCS-S425

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±50, 100, 250, 500, 1000, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Critically damped</li> <li>• Compact</li> <li>• Mechanical stops</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-20°C to 80°C
Dimensions (mm)	14.73 x 9.9 x 4.83
Typical Applications	Auto safety testing for side impact, on-vehicle, sled and in-dummy



### MEAS EGCS-D5

Package	Stainless steel
Type	Screw mount
FS Range (g)	±50, 100, 250, 500, 1000, 2500, 5000, 10000
Unique Features	<ul style="list-style-type: none"> <li>• Rugged design, miniature</li> <li>• Critically damped</li> <li>• In-line amplifier option</li> </ul>
Accuracy	±1.0% non-linearity
Operating Temp.	-40°C to 100°C
Dimensions (mm)	14.2 x 12.7 x 5.6
Typical Applications	Impact and shock testing, drop testing, structural testing

## DC ACCELEROMETERS

Plug and Play, Amplified



### MEAS 4000A, 4001A

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±2, 5, 10, 20, 50, 100, 200
Unique Features	<ul style="list-style-type: none"> <li>• Integral connector option</li> <li>• Gas damping</li> <li>• Low power</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 32 VDC
Operating Temp.	-20°C to 85°C
Dimensions (mm)	18.54 x 18.54 x 8.64
Typical Applications	Low frequency monitoring, transportation, vibration monitoring, motion control



### MEAS 4602, 4604

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±2, 5, 10, 30, 50, 100, 200,
Unique Features	<ul style="list-style-type: none"> <li>• Exceptional temp. compensation</li> <li>• High over-range</li> <li>• Hermetically sealed</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 36 VDC
Operating Temp.	-54°C to 125°C
Dimensions (mm)	21.08 x 21.59 x 7.62
Typical Applications	Flight testing on engines, flutter test, weapons development



### MEAS 4610, 4610A

Package	Anodized aluminum
Type	Screw mount
FS Range (g)	±2, 10, 30, 50, 100, 200, 500
Unique Features	<ul style="list-style-type: none"> <li>• Low noise ranges</li> <li>• Temperature compensation</li> <li>• High over-range</li> <li>• Hermetically sealed</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 36 VDC
Operating Temp.	-40°C to 115°C
Dimensions (mm)	21.59 x 25.4 x 7.62
Typical Applications	Rail motion control, modal analysis, flight test, structural test



### MEAS 4801A

Package	Stainless steel
Type	Stud mount
FS Range (g)	±2, 10, 20, 50, 100, 200, 500, 2000
Unique Features	<ul style="list-style-type: none"> <li>• Hermetically sealed sensor</li> <li>• Integral connector</li> <li>• Signal conditioned</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 36 VDC
Operating Temp.	-55°C to 125°C
Dimensions (mm)	13.33 x 20.83
Typical Applications	Impact testing, structural testing, test and instrumentation, environmental testing



### MEAS 4807A

Package	Stainless steel
Type	Screw mount
FS Range (g)	±2, 5, 10, 20, 30, 50, 100, 200, 500
Unique Features	<ul style="list-style-type: none"> <li>• Ultra low noise</li> <li>• Micro-g resolution</li> <li>• Hermetically sealed</li> <li>• Detachable cable</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 18 VDC
Operating Temp.	-55°C to 125°C
Dimensions (mm)	18.54 x 18.54 x 8.64
Typical Applications	Seismic, structural monitoring, flight testing, trains, machine control, road test



### MEAS 4810A

Package	Stainless steel
Type	Screw mount
FS Range (g)	±2, 5, 10, 20, 30, 50, 100, 200
Unique Features	<ul style="list-style-type: none"> <li>• UltraStable MEMS</li> <li>• Hermetically sealed</li> <li>• Signal conditioned</li> </ul>
Accuracy	±1.0% non-linearity
Excitation Voltage	8 - 36 VDC
Operating Temp.	-55°C to 125°C
Dimensions (mm)	25.4 x 29.1 x 7.6
Typical Applications	Low frequency monitoring, road testing, motion analysis

## DC ACCELEROMETERS

Plug and Play, Triaxial

						
	<b>MEAS EGAXT3</b>	<b>MEAS 53/53A</b>	<b>MEAS 68CM1</b>	<b>MEAS 4630, 4630A</b>	<b>MEAS 4020, 4030</b>	<b>MEAS 606M1</b>
<b>Package</b>	Stainless steel	Anodized aluminum	Stainless steel	Anodized aluminum	Molded plastic	Nitrile rubber pad
<b>Type</b>	Stud mount	Adhesive mount	Screw mount	Screw mount	Screw mount	Removable
<b>FS Range (g)</b>	±5 through 2500	±50, 200, 500, 2000	±500, 1000, 2000	±2, 5, 10, 30, 50, 100, 200, 500	±2, 6	±25
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Sub-miniature</li> <li>• Lightweight</li> <li>• 10,000 g over-range protection</li> </ul>	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Gas damping</li> <li>• Low power</li> </ul>	<ul style="list-style-type: none"> <li>• World SID</li> <li>• Gas damping</li> <li>• Low power</li> </ul>	<ul style="list-style-type: none"> <li>• Low noise ranges</li> <li>• Temperature compensated</li> <li>• High over-range</li> <li>• Hermetically sealed</li> </ul>	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Biaxial, with triaxial option</li> <li>• DC response</li> <li>• Rugged construction</li> </ul>	<ul style="list-style-type: none"> <li>• 0.7 damping ratio</li> <li>• Triaxial, hermetic</li> <li>• Seat pad accelerometer</li> <li>• 606M2 IEPE option</li> </ul>
<b>Accuracy</b>	±1.0% non-linearity	±1.0% non-linearity	±1.0% non-linearity	±1.0% non-linearity	±1.0% non-linearity	±1.0% non-linearity
<b>Operating Temp.</b>	-40°C to 120°C	-20°C to 85°C	-20°C to 85°C	-40°C to 115°C	-40°C to 85°C	-20°C to 85°C
<b>Dimensions (mm)</b>	12.7 x 12.7 x 12.7	18.29 x 13.21 x 7.11	12.7 x 12.7 x 12.7	26.16 x 26.16 x 23.37	71.2 x 40.0 x 15.2	199 x 4
<b>Typical Applications</b>	Flight test, crash, shock monitoring	Auto safety, passenger comfort, transportation, NVH analysis	Auto safety, in-dummy crash, on-vehicle crash	Road testing, motion control, structural testing	Structural monitoring, seismic array, bridge testing	Off road equipment, amusement rides, commercial aircraft

## CHARGE MODE, PIEZOELECTRIC ACCELEROMETERS

Plug and Play

						
	<b>MEAS 7500A</b>	<b>MEAS 7501A</b>	<b>MEAS 7502A</b>	<b>MEAS 7504A, 7505A</b>	<b>MEAS 7514A</b>	<b>MEAS 7531A</b>
<b>Package</b>	Stainless steel	Titanium	Titanium	Stainless steel	Stainless steel	Titanium
<b>Type</b>	Center-hole mount	Center-hole mount	Adhesive mounting	Stud mount	Stud mounting	Adhesive mount
<b>Sensitivity (pC/g)</b>	20, 13, 7	5.6	1.8	5.6	100, 50, 30, 20, 13	1.8
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Hermetically sealed</li> <li>• Isolated mounting surface</li> <li>• Wide bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Hermetically sealed</li> <li>• Bandwidth to &gt;15 kHz</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Hermetically sealed</li> <li>• &lt;1 g</li> <li>• Wide bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Top and side connector option</li> <li>• &gt;15 kHz Bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• &gt;12 kHz bandwidth</li> <li>• High sensitivity</li> </ul>	<ul style="list-style-type: none"> <li>• Triaxial, shear mode</li> <li>• Miniature, light weight</li> <li>• &gt;10 kHz bandwidth</li> </ul>
<b>Operating Temp.</b>	-73°C to 260°C	-73°C to 260°C	-73°C to 260°C	-73°C to 260°C	-73°C to 260°C	-73°C to 260°C
<b>Dimensions (mm)</b>	8.38 x 22.35	5.84 x 14.48	4.40 x 11.94	11.11 x 14.10 (7504A) 11.11 x 19.05 (7505A)	14.99 x 14.99	11.02 x 13.6 x 11.02
<b>Typical Applications</b>	Gearbox vibration monitoring, flight test, high temp. applications	Gearbox vibration monitoring, flight test, high temp. applications	Small structures monitoring, minimal mass loading, high temp. applications	Small structures monitoring, general purpose, high temp. applications	Low frequency vibration, general purpose, high temp. applications	High temp. applications, flight testing, structural monitoring

## VOLTAGE MODE, PIEZOELECTRIC (IEPE) ACCELEROMETERS

Plug and Play

						
	<b>MEAS 7100A, 7101A</b>	<b>MEAS 7102A</b>	<b>MEAS 7108A</b>	<b>MEAS 7104A, 7105A</b>	<b>MEAS 7131A, 7132A</b>	<b>MEAS 7120A, 7122A</b>
<b>Package</b>	Stainless steel / titanium	Titanium	Stainless steel	Stainless steel	Titanium	Titanium
<b>Type</b>	Center-hole mount	Adhesive mount	Adhesive mounting	Stud mounting	Adhesive / stud mounting	Adhesive mounting
<b>Sensitivity (mV/g)</b>	100, 10, 5	100, 50, 20, 10, 5	100, 10	100, 50, 20, 10, 5	500, 100, 50, 10, 5, 2.5	100, 10
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Isolated mounting surface</li> <li>• Hermetically sealed</li> <li>• Wide bandwidth, &gt;10 kHz</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Wide bandwidth</li> <li>• &lt;1 g weight</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Wide bandwidth</li> <li>• Welded construction</li> <li>• Small size</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Wide bandwidth</li> <li>• Top and side connector option</li> </ul>	<ul style="list-style-type: none"> <li>• Triaxial, shear mode</li> <li>• &gt;12 kHz bandwidth</li> <li>• 4-pin connector</li> <li>• Hermetically sealed</li> </ul>	<ul style="list-style-type: none"> <li>• Single axis, shear mode</li> <li>• Miniature cube</li> <li>• 10 - 32 connector</li> <li>• Hermetically sealed</li> </ul>
<b>Operating Temp.</b>	7100A: -55°C to 150°C 7101A: -55°C to 125°C	-55°C to +125°C	-55°C to 125°C	-55°C to 125°C	-55°C to 125°C	-55°C to 125°C
<b>Dimensions (mm)</b>	7100A: 9.9 x 22.35 7101A: 5.84 x 14.48	4.40 x 11.94	9.53 x 10.16	7104A: 11.11 x 14.10 7105A: 11.11 x 19.05	7131A: 11 x 11 x 11 7132A: 15.24 x 20.32 x 13.46	10.16 x 10.16 x 19.16
<b>Typical Applications</b>	Flight testing, general purpose, vibration monitoring	Small structures monitoring, minimal mass loading, general purpose testing	Vibration monitoring, modal testing, general purpose	General purpose IEPE accel, vibration monitoring, lab testing	General purpose, modal testing, vibration monitoring	Modal testing, vibration monitoring, small structures monitoring

## VOLTAGE MODE, PIEZOELECTRIC ACCELEROMETERS

Plug and Play

						
	<b>MEAS 8042</b>	<b>MEAS 8011, 8021-01</b>	<b>MEAS 8032-01</b>	<b>MEAS 8711-01</b>	<b>MEAS 8011, 8021-AR/AP</b>	<b>MEAS 8011, 8021-VR/VP</b>
<b>Package</b>	Titanium	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>Type</b>	Stud mount	Stud / center-hole mount	Stud mount	Stud mount	Stud / center-hole mount	Stud / center-hole mount
<b>Sensitivity (mV/g)</b>	500, 100, 10	500, 100, 10	100, 10	1000, 500, 250, 100	4 - 20 mA RMS or peak	4 - 20 mA RMS or peak
<b>Unique Features</b>	<ul style="list-style-type: none"> <li>• Industrial applications</li> <li>• Submersible</li> <li>• IP68, &gt;100 meters</li> <li>• 16 kHz bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial accelerometer</li> <li>• Case isolated, internal shielding</li> <li>• Reverse wiring protection</li> <li>• ±1.0% non-linearity</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial accelerometer</li> <li>• Case isolated, internal shielding</li> <li>• Low cost</li> <li>• Molded strain relief</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial accelerometer</li> <li>• Case isolated, internal shielding</li> <li>• Low cost</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial accelerometer</li> <li>• Case isolated, internal shielding</li> <li>• 50, 20, 10, 5 g ranges</li> </ul>	<ul style="list-style-type: none"> <li>• Velocity transmitter</li> <li>• Case isolated, internal shielding</li> <li>• 0.5 to 5.0 in/sec</li> </ul>
<b>Operating Temp.</b>	-20°C to 80°C	-55°C to 125°C	-55°C to 100°C	-55°C to +125°C	-40°C to 85°C	-40°C to 85°C
<b>Dimensions (mm)</b>	22.23 x 48.26	22.23 x 48.26	14.3 x 45.3	22.23 x 50.80	22.23 x 48.26	22.23 x 48.26
<b>Typical Applications</b>	Submersed pump monitoring, underwater research, gearbox monitoring	Industrial applications, machine monitoring, intrinsic safety	Industrial applications, machine monitoring	Industrial applications, machine monitoring, wind turbines	Industrial applications, machine monitoring, intrinsic safety	Industrial applications, machine monitoring, intrinsic safety

## ELECTRONICS

### Signal Conditioners



**MEAS 121**

**Type** Bench top  
**# of Channels** 3  
**Gain Range** 0.001 to 9999  
**Unique Features**

- Universal DC amplifier
- Low noise operation with auto-zero
- For bridge type sensors
- $\mu$ P controlled, programmable
- Low pass filter options

**Dimensions (mm)** 301 x 258 x 102  
**Typical Applications** Instrumentation labs, test benches, R&D facilities



**MEAS 130**

**Type** In-line charge converter  
**# of Channels** 1  
**Gain Range** 0.1, 1, 10  
**Unique Features**

- Low noise
- Small package
- Wide bandwidth
- BNC male or female

**Dimensions (mm)**  $\varnothing$ 13.8 x 52.2  
**Typical Applications** Instrumentation labs, high temperature testing PE accelerometer



**MEAS 140/142**

**Type** Auto-zero inline amplifier  
**# of Channels** 1  
**Gain Range** 10, 25, 50, 100, 200, 500  
**Unique Features**

- $\pm 1.5$  mV auto-zero
- For bridge type sensor (140)
- For strain gage (142)
- Lowest noise
- 5 to 30 VDC excitation

**Dimensions (mm)** 56.9 x 25.4 x 12.7  
**Typical Applications** Instrumentation labs, test benches, R&D facilities



**MEAS 160**

**Type** Bench top  
**# of Channels** 1  
**Gain Range** 1, 10  
**Unique Features**

- Economical IEPE power supply
- Portable, compact
- Rechargeable battery

**Dimensions (mm)** 3.95 x 2.83 x 1.58  
**Typical Applications** Instrumentation



**MEAS 161**

**Type** Bench top  
**# of Channels** 4  
**Gain Range** 0.001 to 999.9  
**Unique Features**

- Charge and IEPE conditioner
- Sensitivity normalization
- LCD display
- Support IEEE 1451.4 TEDS
- 10 V peak linear output
- Selectable LP filter

**Dimensions (mm)** 310 x 180 x 115  
**Typical Applications** Instrumentation labs, PE / IEPE sensors