



SENSORS FOR DURABILITY & DRIVEABILITY TESTING

» Including **ENDEVCO** sensors, electronics, and cables



DURABILITY & DRIVEABILITY TESTING

Though rarely seen by the public, every vehicle undergoes a rigorous cycle of being tested, tested again, retested elsewhere, broken and repaired, then carefully inspected for wear and damage. This is only a small part of the testing our customers perform using accelerometers, force and strain sensors, pressure sensors, and cable assemblies.

With PCB Piezotronics' sensors, data is captured in real-time during on-road and off-road tests to ensure seamless component integration and provide invaluable insight into vehicle responsiveness, stability, and comfort. Our sensors are specially designed for the complex static, dynamic, and thermal loading conditions of today's automotive testing, delivering precise data to measure vehicle performance and ensure the durability of parts and systems throughout their lifespan.

The merger of Endevco and PCB Piezotronics brings together two powerhouses in the automotive sector with over 120 years of collective testing expertise. This collaboration results in a robust portfolio of sensor solutions capable of enduring the most challenging conditions, from severe shock and vibration tests to extreme weather conditions. With this enhanced portfolio, automotive engineers are equipped to certify that every vehicle not only meets but exceeds the highest standards of safety and reliability, promising exceptional performance on the road ahead.

Sensor Types:

- MEMS VC accelerometers
- Single-axis ICP® accelerometers
- Triaxial ICP® accelerometers
- Quartz ICP® accelerometers
- Charge output accelerometers
- ICP® force sensors
- Strain gage load cells

Typical Applications:

- Road load data acquisition (RLDA)
- Fishhook, on-center, step steer, and steering pad track testing
- Pedal force (brake, accelerator, and clutch) testing
- Longitudinal vehicle acceleration measurements
- Vehicle pitch measurements



MEMS VC ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

PCB® Series 3711F, 3713F, 3741F, and 3743G variable capacitance (VC) MEMS accelerometers measure vibration down to 0 Hz, making them ideal for applications like road load data acquisition (RLDA), driveability, ride and handling, and low-frequency NVH studies. With full-scale ranges from ± 2 g to ± 200 g, they offer high resolution, low spectral noise, and robust silicon MEMS elements for reliable, repeatable performance—even under high frequency overload.



SINGLE-ENDED VC MEMS ACCELEROMETERS

SERIES 3711F & 3713F

- Sensitivity: 6.75 to 675 mV/g
- Measurement Range: ± 2 g pk to ± 200 g pk
- Frequency Range: 0 to 1.5k Hz ($\pm 5\%$)
- Case isolated, hermetically sealed titanium housing
- Available with integral cable or multi-pin, threaded electrical connector



DIFFERENTIAL OUTPUT, SINGLE AXIS VC MEMS ACCELEROMETERS

SERIES 3741F

- Sensitivity: 13.5 to 1350 mV/g
- Measurement Range: ± 2 to ± 200 g pk
- Frequency Range: 0 to 1.5k Hz ($\pm 5\%$)
- Ground isolated, hard-anodized aluminum housing
- Integral, 4-conductor shielded cable



DIFFERENTIAL OUTPUT, TRIAXIAL VC MEMS ACCELEROMETERS

SERIES 3743G

- Sensitivity: 13.5 mV/g to 1350 mV/g
- Measurement Range: ± 2 to ± 200 g pk
- Frequency Range: 0 to 1.5k Hz ($\pm 5\%$)
- Case isolated, hermetically sealed stainless steel housing
- M8x1 8-pin connector (3743G11) / integral cable - IP67 (3743G12)

MINIATURE LIGHTWEIGHT SINGLE AXIS ICP® ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

Specific vehicle and component durability application testing requires small, lightweight accelerometers for high-frequency response, low noise, minimal mass loading, and installation in space restricted locations. PCB® offers a line of ceramic shear ICP® accelerometers housed in lightweight aluminum or robust hermetically sealed titanium. By minimizing the mass of the sensor, mass loading effects are reduced, leading to improved measurement accuracy.



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352A21

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 0.7 to 13k Hz (±10 %)
- Size: 0.14 x 0.45 x 0.25 in
3.6 x 11.4 x 6.4 mm
- Weight: 0.02 oz (0.6 gm)



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352A73

- Sensitivity: 5 mV/g
- Measurement Range: ±1000 g pk
- Frequency Range: 1.5 to 25k Hz (±10 %)
- Size: 0.11 x 0.34 x 0.16 in
2.8 x 8.6 x 4.1 mm
- Weight: 0.01 oz (0.3 gm)



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352C23

- Sensitivity: 5 mV/g
- Measurement Range: ±1000 g pk
- Frequency Range: 1.5 to 15k Hz (±10 %)
- Size: 0.11 x 0.34 x 0.16 in
2.8 x 8.6 x 4.1 mm
- Weight: 0.007 oz (0.2 gm)



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352C41

- Sensitivity: 10 mV/g
- Measurement Range: ± 500 g pk
- Frequency Range: 0.5 to 10k Hz (±10 %)
- Size: 0.38 x 0.38 in 9.7 x 9.7 mm
- Weight: 0.10 oz (2.8 gm)



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352C42

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.5 to 10k Hz (±10 %)
- Size: 0.38 x 0.38 in 9.7 x 9.7 mm
- Weight: 0.10 oz (2.8 gm)



MINIATURE ICP® ACCELEROMETER

MODELS 352A24

- Sensitivity: 100 mV/g
- Measurement Range: ±50 g pk
- Frequency Range: 0.8 to 10k Hz (±10 %)
- Size: 0.19 x 0.48 x 0.28 in
4.8 x 12.2 x 7.1 mm
- Weight: 0.03 oz (0.8 gm)



LIGHTWEIGHT ICP® ACCELEROMETER

MODEL 352C03

- Sensitivity: 10 mV/g
- Measurement Range: ± 500 g pk
- Frequency Range: 0.3 to 15000 Hz (± 10 %)
- Size (hex x height): 0.44 x 0.62 in 11.2 x 15.7 mm
- Weight: 0.20 oz (5.8 gm)



MINIATURE ICP® ACCELEROMETER

MODEL 352C68

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.3 to 12000 Hz (± 10 %)
- Size (hex x height): 9.32 x 0.73 in 9.32 x 18.5 mm
- Weight: 0.070 oz (2 gm)



MINIATURE ICP® ACCELEROMETER

MODEL 352C65

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.3 to 12000 Hz (± 10 %)
- Size (hex x height): 0.37 x 0.55 in 9.5 x 14.0 mm
- Weight: 0.070 oz (2 gm)



HIGH SENSITIVITY ICP® ACCELEROMETER

MODEL 352C33

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.3 to 15k Hz (± 10 %)
- Size (hex x height): 0.44 x 0.62 in 11.2 x 15.7 mm
- Weight: 0.20 oz (5.8 gm)



HIGH SENSITIVITY ICP® ACCELEROMETER

MODEL 352C34

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.5 to 10k Hz (± 10 %)
- Size (hex x height): 0.44 x 0.88 in 11.2 x 2.4 mm
- Weight: 0.20 oz (5.8 gm)



HIGH SENSITIVITY ICP® TRIAXIAL ACCELEROMETER

MODEL 356A16

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.3 to 6k Hz (± 10 %)
- Size: 0.55 x 0.80 x 0.55 in 14.0 x 20.3 x 14.0 mm
- Weight: 0.26 oz (7.4 gm)



HIGH SENSITIVITY ICP® TRIAXIAL ACCELEROMETER

MODEL 356A17

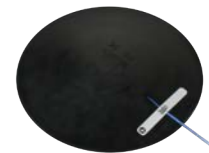
- Sensitivity: 500 mV/g
- Measurement Range: ± 10 g pk
- Frequency Range: 0.4 to 4k Hz (± 10 %)
- Size: 0.55 x 0.80 x 0.55 in 14.0 x 20.3 x 14.0 mm
- Weight: 0.33 oz (9.3 gm)



HIGH SENSITIVITY ICP® TRIAXIAL ACCELEROMETER

MODEL 356B18

- Sensitivity: 1000 mV/g
- Measurement Range: ± 5 g pk
- Frequency Range: 0.3 to 5k Hz (± 10 %)
- Size: 0.80 x 1.03 x 0.80 in 20.3 x 26.1 x 20.3 mm
- Weight: 0.88 oz (25 gm)



TRIAxIAL ICP® SEAT PAD ACCELEROMETER PER ISO 10326-1

MODEL 356B41

- Sensitivity: 100 mV/g
- Measurement Range: ± 10 g pk
- Frequency Range: 0.5 to 1k Hz (± 5 %)
- Removable Accelerometer



LOW TEMPERATURE COEFFICIENT, TRIAXIAL ICP® ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

PCB® Series 339A Triaxial ICP® accelerometers are designed with a low temperature coefficient, wide operating temperature range, and good broadband measurement resolution, making them ideal for any vibration measurement requiring tight control of amplitude sensitivity over a wide thermal gradient. With a temperature coefficient of less than 0.0125% / °F (0.02% / °C), these sensors provide precision amplitude data for test applications with large thermal shifts such as durability testing in a climatic chamber. ICP® sensors are characterized by fixed voltage sensitivity, regardless of cable type or length; low-impedance output signal, which can be transmitted over long cables in harsh environments with virtually no loss in signal quality; low-noise, voltage-output signal compatible with standard readout, signal analysis, recording, and data acquisition equipment.



UHT-12™ TRIAXIAL ICP® ACCELEROMETER

MODEL 339A30

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 2 to 8000 Hz (±5 %)
- Temperature Range (Operating): -65 to +325 °F (-54 to +163 °C)



UHT-12™ TRIAXIAL ICP® ACCELEROMETER

MODEL HT339C31

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 2 to 8000 Hz (±5 %)
- Temperature Range (Operating): -65 to +325 °F (-54 to +163 °C)



UHT-12™ TRIAXIAL ICP® ACCELEROMETER

MODEL TLD339A37

- Sensitivity: 100 mV/g
- Measurement Range: ±50 g pk
- Frequency Range: 0.2 to 7k Hz (±10 %)
- Temperature Range (Operating): -65 to +356 °F (-54 to +180 °C)

HIGH TEMPERATURE ICP® ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

High temperature ICP® accelerometers are specially designed and tested to survive temperature extremes beyond the range of standard ICP® accelerometers. These sensors are ideal for use in engine, turbo, exhaust and other high temperature vehicle and component durability testing environments.



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C18

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 0.7 to 18k Hz (±10 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C03

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 0.7 to 9k Hz (±10 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C15

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 0.7 to 18k Hz (±10 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C04

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 0.7 to 9k Hz (±10 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C33

- Sensitivity: 100 mV/g
- Measurement Range: ±50 g pk
- Frequency Range: 0.7 to 6k Hz (±10 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)



HIGH TEMP ICP® ACCELEROMETER

MODEL 320C52

- Sensitivity: 10 mV/g
- Measurement Range: ±500 g pk
- Frequency Range: 1 to 10k Hz (±5 %)
- Temperature Range: -100 to +325 °F (-73 to +163 °C)

QUARTZ SHEAR ICP® ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

PCB® quartz sensing crystals offer the most stable operation over time with virtually no change in sensitivity and performance even after multiple overload events. The quartz crystal's low temperature coefficient properties improve measurement accuracy in vibration testing that incorporates thermal cycling. Titanium housings provides lightweight construction for maximum frequency range and to minimize mass loading, as well as provide excellent protection against many corrosives.



QUARTZ SHEAR ICP® ACCELEROMETER

MODELS 353B01 & 353B03

- Sensitivity: 20 / 10 mV/g
- Measurement Range: ± 250 / ± 500 g pk
- Frequency Range: 0.7 to 10k Hz (± 10 %) / 0.7 to 11k Hz (± 10 %)



QUARTZ SHEAR ICP® ACCELEROMETER

MODELS 353B04

- Sensitivity: 10 mV/g
- Measurement Range: ± 500 g pk
- Frequency Range: 0.7 to 11k Hz (± 10 %)



QUARTZ SHEAR ICP® ACCELEROMETER

MODELS 353B31 & 353B33

- Sensitivity: 50 / 100 mV/g
- Measurement Range: ± 100 / ± 50 g pk
- Frequency Range: 0.7 to 8k Hz (± 10 %) / 0.7 to 6.5k Hz (± 10 %)



QUARTZ SHEAR ICP® ACCELEROMETER

MODEL 353B12

- Sensitivity: 5 mV/g
- Measurement Range: ± 1000 g pk
- Frequency Range: 0.7 to 20k Hz (± 10 %)



QUARTZ SHEAR ICP® ACCELEROMETER

MODEL 353B18

- Sensitivity: 10 mV/g
- Measurement Range: ± 500 g pk
- Frequency Range: 0.7 to 18k Hz (± 10 %)



QUARTZ SHEAR ICP® ACCELEROMETER

MODEL 353B34

- Sensitivity: 100 mV/g
- Measurement Range: ± 50 g pk
- Frequency Range: 0.7 to 7k Hz (± 10 %)

CHARGE OUTPUT ACCELEROMETERS FOR DURABILITY & DRIVEABILITY APPLICATIONS

Charge output accelerometers offer high performance for precision vibration measurements in high-temperature environments. These accelerometers are ideal for structural testing, machine monitoring, and vehicular shock and vibration measurement tasks where high temperatures preclude the use of accelerometers with built-in microelectronics.



TRIAxIAL CHARGE OUTPUT ACCELEROMETER

MODEL 357A67

- Sensitivity: 3.0 pC/g
- Measurement Range: ± 1000 g pk
- Frequency Range: 1 to 10k Hz (± 10 %)
- Temperature Range (Operating): -76 to +392°F (-60 to +200 °C)



CHARGE OUTPUT ACCELEROMETER

MODEL 357B03

- Sensitivity: 10 pC/g
- Measurement Range: ± 2000 g pk
- Frequency Range: 12k Hz (± 10 %)
- Temperature Range (Operating): -95 to +500 °F (-71 to +260 °C)



CHARGE OUTPUT ACCELEROMETER

MODEL 357B04

- Sensitivity: 10 pC/g
- Measurement Range: ± 2000 g pk
- Frequency Range: 12k Hz (± 10 %)
- Temperature Range (Operating): -95 to +500 °F (-71 to +260 °C)



CHARGE OUTPUT ACCELEROMETER

MODEL 357B11

- Sensitivity: 3 pC/g
- Measurement Range: ± 2300 g pk
- Frequency Range: 16k Hz (± 10 %)
- Temperature Range (Operating): -95 to +500 °F (-71 to +260 °C)



CHARGE OUTPUT ACCELEROMETER

MODEL 357B61

- Sensitivity: 10 pC/g
- Measurement Range: ± 1000 g pk
- Frequency Range: 5k Hz (± 5 %)
- Temperature Range (Operating): -65 to +900 °F (-54 to +482 °C)



CHARGE OUTPUT ACCELEROMETER

MODEL 357B69

- Sensitivity: 3.5 pC/g
- Measurement Range: ± 500 g pk
- Frequency Range: 6k Hz (± 5 %)
- Temperature Range (Operating): -65 to +900 °F (-54 to +482 °C)



MULTI-PURPOSE ICP® & CHARGE FORCE SENSORS FOR DURABILITY & DRIVEABILITY APPLICATIONS

PCB® purpose force sensors are constructed with stainless steel housings and piezoelectric quartz sensing elements, which are “sandwiched” between upper and lower base plates. The sensing elements are preloaded in compression to a specific value and welded into an assembly. Each unit is factory calibrated for dynamic force measurement applications; compression, tension, and impact.



ICP® DYNAMIC FORCE SENSOR: 10 LB – 5000 LB

SERIES 208C

- Sensitivity: 1 mV/lb to 500 mV/lb
- Measurement Range: 10 lb to 5000 lb
- Low Frequency Response: 0.0003 Hz to 0.01 Hz (-5 %)



DYNAMIC FORCE SENSOR: 10 LB

SERIES 221B

- Sensitivity: 10 mV/lb to 500 mV/lb
- Measurement Range: 10 lb to 500 lb
- Low Frequency Response: 0.002 Hz to 0.01 Hz (-5%)
- Maximum Static Force: 60 lb to 3000 lb



ICP® QUARTZ FORCE RING: 10 LB

SERIES 201B

- Sensitivity: 10 mV/lb to 500 mV/lb
- Measurement Range: 10 lb to 500 lb
- Low Frequency Response: 0.002 Hz to 0.01 Hz (-5%)
- Maximum Static Force: 60 lb to 3000 lb



ENDEVCO ANGULAR RATE SENSOR & 6DOF

ANGULAR RATE AND 6 DOF SENSORS

The Endevco® Model 7310A is an angular rate sensor that utilizes unique silicon MEMS gyroscope technologies with custom electronics and packaging to provide reliable sensing performance even under excessive shock and vibration environments. This angular rate sensor is designed specifically for automotive testing and other system designs requiring accurate measurement of angular velocity.

The Model 7360A is a six degrees of freedom (6DoF) sensor that provides analog output for three axes of linear acceleration and three axes of angular rate in a compact, roughly one inch cube package. A sensor with analog output offers the advantage of being able to troubleshoot the data to its source and examine the output compared to its time history.

With this new 6DoF sensor, professionals in automotive development are now able to measure linear and rotational dynamics that previously required multiple sensors and much more space.



ANGULAR RATE SENSOR

MODEL 7310A

- 7 Angular Rate Ranges from 100 to 18K deg/sec
- Up to 2000 Hz bandwidth
- Lightweight, mass less than 3 grams



TRIAxIAL ANGULAR RATE SENSOR

MODEL 7330

- Ranges of 100, 500, 1500, 6K, 8K, 12K and 18K deg/sec
- Up to 2000 Hz bandwidth
- Weighs less than 10 grams



SIX DEGREE OF FREEDOM SENSOR

MODEL 7360

- 6 Angular Rate ranges from 100 to 18K deg/sec
- 5 Linear Acceleration ranges from ± 2 to ± 500 g
- Shock limit 5000 g

CABLES & CONNECTORS



GENERAL PURPOSE COAX / TWISTED PAIR CABLES

Model Number	018G10	002P10	018C10	3024	3024M1
Sensor Connector	5-44 Plug	5-44 Plug	5-44 Plug	10-32 Plug	10-32 Plug
DAQ Connector	10-32 Plug	BNC Plug	BNC Plug	Pigtails	Pigtails
Jacket Material	PVC / Black	FEP / White	PVC / Black	TFE / Red & Black	FEP / White
Temperature Range	-22 to 221 °F (-30 to 105 °C)	-85 to 329 °F (-65 to 165 °C)	-22 to 221 °F (-30 to 105 °C)	-300 to 350 °F (-184 to 176 °C)	-300 to 350 °F (-184 to 176 °C)



Model Number	002A10	002C10	002B03	002T10	012A10	024R10
Sensor Connector	10-32 Plug	10-32 Plug	10-32 Plug	BNC Plug	BNC Plug	5/8-24 2-socket Plug
DAQ Connector	10-32 Plug	BNC Plug	BNC Jack	BNC Plug	BNC Plug	BNC Plug
Jacket Material	FEP / White	FEP / White	FEP / White	FEP / White	PVC / Black	Polyurethane / Black
Temperature Range	-130 to 400 °F (-90 to 204 °C)	-85 to 329 °F (-65 to 165 °C)	-85 to 329 °F (-65 to 165 °C)	-85 to 329 °F (-65 to 165 °C)	-40 to 176 °F (-40 to 80 °C)	-58 to 250 °F (-50 to 121 °C)



LOW NOISE COAX / TWISTED PAIR CABLES

Model Number	3093M10	030A10	030C10	003G10	003P10	3091F
Sensor Connector	1-64 Jack	3-56 Plug	3-56 Plug	5-44 Plug	5-44 Plug	6-40 Plug
DAQ Connector	10-32 Jack	10-32 Plug	BNC Plug	10-32 Plug	BNC Plug	10-32 Plug
Jacket Material	TFE / Red	FEP / Blue	FEP / Blue	TFE / Blue	TFE / Blue	TFE / Red
Temperature Range	-425 to 350 °F (-254 to 177 °C)	-130 to 500 °F (-90 to 260 °C)	-85 to 329 °F (-65 to 165 °C)	-320 to 500 °F (-196 to 260 °C)	-85 to 329 °F (-65 to +165 °C)	-300 to 500 °F (-184 to 260 °C)

RECOMMENDED ELECTRONICS



1-4 CHANNEL SIGNAL CONDITIONERS								
Model Number	482C05	482C15	482C16	482C24	482C27	482C54/64	2775C	6634D
Channels	4						1	
Power	DC powered through AC to DC converter (supplied)							
Sensor Types	ICP®	ICP®, voltage, charge	ICP®, voltage		ICP®, voltage, bridge /differential	ICP®, voltage, charge	IEPE, Charge	Differential PE, PE, ICP®/IEPE, VELCOIL/RCC
Typical Applications	Depending on model, these are compatible with charge output piezoelectric sensors, bridge/differential sensors, ICP® and IEPE, and any voltage input signal							



8 CHANNEL SIGNAL CONDITIONERS					
Model Number	483C05	483C15	483C28	483C50	483C41
Channels	8				
Power	AC Power				
Sensor Types	ICP®, voltage		ICP®, voltage, bridge / differential	ICP®, voltage	ICP®, voltage, charge
Features	Unity gain	Selectable gain x1, x10, x100, optional filters	Incremental gain x0.1 to x200, auto-zero, Ethernet, optional filters	Incremental gain x0.1 to x200, Ethernet, optional filters	Incremental gain x0.1 to x200, Ethernet, front-panel keypad, optional filters
Typical Applications	Models compatible with charge output piezoelectric sensors, bridge/differential sensors, and any voltage input signal				



REMOTE CHARGE CONVERTERS					
Model Number	2771C-01	2771C-1	2771C-5	2771C-10	2771CM2-1
Sensitivity	0.1 mV/pC	1 mV/pC	5 mV/pC	10 mV/pC	1 mV/pC
Input Range	50,000 pCpk	5,000 pCpk	1,000 pCpk	500 pCpk	5,000 pCpk
Frequency Range	0.4 Hz		2 Hz		3 Hz - 30 kHz
Output Voltage Range	10 V pk-pk maximum				
Typical Applications	Transforms piezoelectric transducers' high impedance charge output to a low impedance voltage proportional to the charge				For extreme temperature sensors



REMOTE CHARGE CONVERTERS						
Model Number	422E12	422E51	422E52	422E53	422E54	422E55
Sensitivity ($\pm 2\%$) (Charge Conversion)	10 mV/pC	100 mV/pC	10 mV/pC	1 mV/pC	0.1 mV/pC	0.5 mV/pC
Input Range	± 250 pC	± 50 pC	± 500 pC	$\pm 5,000$ pC	$\pm 50,000$ pC	---
Frequency Range	5 Hz - 100 kHz	5 Hz - 100 kHz	5 Hz - 100 kHz	5 Hz - 50 kHz	5 Hz - 50 kHz	0.5 Hz - 100 kHz
Output Voltage Range	± 2.5 V	± 5.0 V	± 5.0 V	± 5.0 V	± 5.0 V	± 5.0 V
Typical Applications	Condition signals from charge output piezoelectric sensors converting them from high impedance charge signals into low impedance voltage signals					



Model Number	422E35	422E36	422E65/A
Sensitivity ($\pm 2\%$) (Charge Conversion)	1 mV/pC	10 mV/pC	0.5 mV/pC
Input Range	$\pm 2,500$ pC	± 250 pC	± 50 pC
Frequency Range	5 Hz - 100 kHz	5 Hz - 100 kHz	5 Hz - 35 kHz
Output Voltage Range	± 2.5 V	± 2.5 V	± 5.0 V
Typical Applications	For extreme temperature sensors		Radiation hardened for use in nuclear power generation



BATTERY OPERATED / DC POWERED IEPE SIGNAL CONDITIONERS

Model Number	4416C	485B36	480C02	480E09	480B21
Channels	1	2	1		3
Power	Rechargeable internal battery	DC power	Internal battery		
Sensor Types	ICP®	ICP®	ICP®	ICP®	ICP®
Features	Gain x1, x10, x100, low pass filter, status indicator	USB-powered, unity gain	Unity gain, status indicator	Gain x1, x10, x100, status indicator	Gain x1, x10, x100, status indicator
Typical Applications	Supplies power to IEPE/ICP® transducers from a constant current source				



MEMS SIGNAL CONDITIONERS

Model Number	4418	478B05
Channels	1	3
Power	Rechargeable internal battery	DC power
Sensor Types	MEMS and capacitive sensors	
Features	Gain x1, x10, x100, low pass filter, status indicator, ZMO adjustment	DC offset adjust, status indicator
Typical Applications	Supplies power to MEMS and capacitive sensors	



SENSOR SIMULATORS

Model Number	401B04	4830B
Power	---	Rechargeable internal battery
Sensor Types	ICP®	Simulates ICP®, voltage, PE, and differential PE
Features	Accepts test signals from a voltage function generator	Front keypad control, programmable profiles, tach output
Typical Applications	Sensor simulator for signal conditioner testing	



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