MEMS DC RESPONSE ACCELEROMETERS

- Six measurement ranges from ± 2 to ± 200 g
- Improved frequency response
- Reduced spectral noise
- Improved broadband resolution
- Single-ended or differential output signal
- Lightweight titanium or aluminum housings

TYPICAL APPLICATIONS

- Aerospace Vibration Testing - Flutter/Buffeting & Landing Gear
- Simulated Environmental Testing with Shakers & Centrifuges
- Suspension, Shock Absorption, and Damping
- Driveability, Ride & Handling
- Brake & Steering Development
- Road Load Data Acquisition

LOW FREQUENCY MEASUREMENTS WITH GAS-DAMPED, SILICON MEMS TECHNOLOGY

PCB® Series 3711 (single axis), 3713 (triaxial), and 3741 (single axis, differential output) MEMS DC response accelerometers are designed to measure low-frequency vibration and motion and are offered in full-scale ranges from ± 2 to ± 200 g to accommodate a variety of testing requirements. The units feature gas-damped, silicon MEMS sensing elements for uniform, repeatable performance and offer high frequency overload protection.

Electrically, the units offer a single-ended or differential output signal with power, signal, and ground leads for each channel. Supply voltage regulation permits operation from +5 to +32 VDC and the low-noise, low-impedance output signal may be transmitted over long cable lengths without degradation.

As with all PCB instrumentation, these sensors are complemented with toll-free applications assistance, 24-hour customer service, and are backed by a no-risk policy that guarantees total customer satisfaction.
Rugged and Durable Series 3711 & 3713 MEMS DC Response sensors are hermetically sealed in a robust titanium housing allowing for a very stable and accurate measurement in the most severe operating environments. In addition, this series is inherently insensitive to base strain and transverse acceleration effects. Supply voltage regulation permits operation from +5 to +32 VDC and the single-ended, low-noise, low-impedance output signal may be transmitted over long cable lengths without degradation. The series is available in single axis and triaxial versions with a 10 ft (3 m) integral cable or a multi-pin, threaded, electrical connector for easy installation and setup.

Precision Series 3741 MEMS DC Response sensors are low-profile and low-mass with mechanical overload stops and a hard-anodized aluminum housing for added durability. The units offer a differential output signal for common-mode noise rejection and incorporate many advanced features. This includes supply voltage regulation and a proprietary temperature compensation circuit for stable performance over the entire operating temperature range. Each unit is provided with an integral, 4-conductor, 10 ft (3 m) shielded cable. An optional mounting adaptor, model 080A208, facilitates triaxial measurement configurations.
### MODEL NUMBERING SYSTEM

1) **Series**
- 3741F Single axis, MEMS DC response accelerometer, differential
- 3713F Triaxial, MEMS DC response accelerometer
- 3711F Single axis, MEMS DC response accelerometer

2) **Cable**
- 11 Multi-pin, threaded, electrical connector (3711 & 3713 only)
- 12 Standard, 10 ft (3.0 m) integral cable and pigtail termination

3) **Measurement Range**
- 2G ± 2 g measurement range
- 10G ± 10 g measurement range
- 30G ± 30 g measurement range
- 50G ± 50 g measurement range
- 100G ± 100 g measurement range
- 200G ± 200 g measurement range

4) **Integral Cable Length (add only if selecting other than standard 10 ft (3 m) length)**
   /XXX Specify XXX as desired cable length in feet (specify MXXX for desired cable length in meters)

5) **Cable Termination**
- AY 4-pin plug (Series 3711 & 3741 only)
- DZ Pigtail, stripped and tinned ends (Series 3711 & 3713 only)
- EN 9-pin plug (Series 3713F11 only)
- HW 9-pin D-sub plug for mating to Model 478A30 signal conditioner (Series 3741 only)
- JJ Pigtail, stripped and tinned ends (Series 3741 only)
- LN 8-pin mini DIN for mating to Models 482C27 or 483C28 signal conditioners (Series 3741 only)
- LT 8-pin mini DIN for mating to Models 482C27 or 483C28 signal conditioners (Series 3711 only)

**Example**

<table>
<thead>
<tr>
<th>Series</th>
<th>Cable</th>
<th>Measurement Range</th>
<th>Cable Termination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3713F</td>
<td>12</td>
<td>10G</td>
<td>DZ</td>
<td>Triaxial MEMS DC response accelerometer, ± 10 g measurement range, 5 ft (1.5 m) integral cable pigtail</td>
</tr>
</tbody>
</table>
MTS Sensors, a division of MTS Systems Corporation (NASDAQ: MTSC), vastly expanded its range of products and solutions after MTS acquired PCB Piezotronics, Inc. in July, 2016. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corp.; IMI Sensors and Larson Davis are divisions of PCB Piezotronics, Inc.; Accumetrics, Inc. and The Modal Shop, Inc. are subsidiaries of PCB Piezotronics, Inc.