## Model PR710 series
### Rack mountable signal conditioners

<table>
<thead>
<tr>
<th>Input characteristics</th>
<th>PR710A</th>
<th>PR710B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage to transducer</td>
<td>24 VDC</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Current to transducer</td>
<td>4 mA</td>
<td>4 mA</td>
</tr>
<tr>
<td>Maximum input voltage (gain = 1)</td>
<td>6.5 V rms</td>
<td>6.5 V rms</td>
</tr>
</tbody>
</table>

### Output characteristics

| Output impedance | 50 Ω | 50 Ω |
| Recommended load impedance | 50 kΩ | 50 kΩ |
| Maximum output voltage | 6.5 V rms | 6.5 V rms |
| Noise, RTI 2.5 to 25 kHz | < 20 µV rms | < 5 µV |
| Spectral noise, input, [nominal] dB/√Hz: |
| 2 Hz | -140 | -140 |
| 10 Hz | -150 | -150 |
| 100 Hz | -150 | -150 |

### Transfer characteristics

<table>
<thead>
<tr>
<th>Channels</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain</td>
<td>1, 10, or 100</td>
</tr>
<tr>
<td>Gain accuracy</td>
<td>±0.2 dB</td>
</tr>
<tr>
<td>Frequency response:</td>
<td></td>
</tr>
<tr>
<td>None, &lt; -3 dB</td>
<td>0.05 - 45,000 Hz</td>
</tr>
<tr>
<td>Filter, &lt; 3 dB</td>
<td>0.05 - 1,000 Hz</td>
</tr>
<tr>
<td>Velocity, &lt; 3 dB</td>
<td>1.0 - 20,000 Hz</td>
</tr>
<tr>
<td>Amplitude nonlinearity</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Total Harmonic distortion</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Channel separation</td>
<td>&gt; 60 dB</td>
</tr>
</tbody>
</table>

### Power requirements

| Voltage, min | 28-30 VDC |
| Current, max | 500 mA |

### Environmental

| Temperature | 0 to 55°C |
| Relative humidity, non condensing | 5% to 95% |
| Usable altitude limit | 2,000 meters |

### Physical characteristics

| Dimensions | 19”W x 5.22”H x 3.7”D |
| Connectors: |
| Signal input | Isolated BNC |
| Signal output | Isolated BNC |
| Signal output | Twin axial BNC |

Features:
- 10 channels
- Powers 700 Series accelerometers
- Low noise amplifier for each channel
- Selectable gain of X1, X10 or X100
- Replaceable channel modules
- Continuous fault monitoring of each channel
- Optional low or high pass filtering
- Standard 19” rack mountable
- Selectable filtering: no filter, 2-pole butterworth & velocity conversion

Velocity conversion [X1 gain]
Sensitivity of accelerometer = x mV/g
Sensitivity of velocity = (x/10) mV/ips

Velocity conversion gain [ips/g] 0.1
i.e - 100 mV/g will give 10 mV/in/sec
with gain switch at X1

Options: Custom gains & filter cutoffs available, and bench mount PR710-stand.
Accessories supplied: A69137 power supply to provide 30 volts DC power to PR710.
From 47-63Hz, 100-250 Vac power.