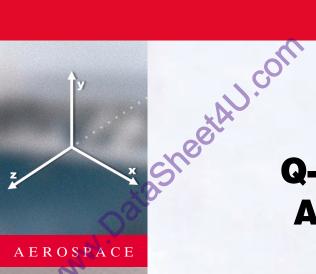
# **Honeywell**



Q-Flex® QA1500 **Accelerometer**  High-g tactical

navigation



## **QA1500 Accelerometer**

Providing high-g tactical navigation capability, Honeywell produces the Q-Flex® QA1500 primarily for tactical missile guidance applications.

As with the entire Q-Flex family of accelerometers, the QA1500 features a patented Q-Flex® etched-quartz-flexure seismic system. An amorphous quartz proof-mass structure provides excellent bias, scale factor, and axis alignment stability.

The integral Q-Flex electronics develops an acceleration-proportional output current providing both static and dynamic acceleration measurement. By use of a customer supplied output load resistor, appropriately scaled for the acceleration range of the application, the output current can be converted into a voltage.

The QA1500 also includes a current- output, internal temperature sensor. By applying temperature-compensating algorithms, bias, scale factor, and axis misalignment performance are dramatically improved.

Robust design and quality assurance provides superior reliability.

#### **Features**

- High-g acceleration measurement
- Environmentally rugged
- Analog output
- Field-adjustable range
- Four fastener mounting flange
- Internal temperature sensor for thermal compensation
- Built-in-test

## **Specifications**

#### **Performance**

<ul> <li>Input range</li> </ul>	±90 g
• Bias	<10 mg
<ul> <li>One-year repeatability</li> </ul>	<1500 µg
• Scale factor	9 mA/g $\pm 10\%$
<ul> <li>One-year repeatability</li> </ul>	<1500 ppm
<ul> <li>Axis misalignment</li> </ul>	<3 mrad
<ul> <li>One-year repeatability</li> </ul>	<300 μrad
<ul> <li>Resolution / Threshold</li> </ul>	<1 µg
<ul> <li>Bandwidth</li> </ul>	>300 Hz

#### **Environmental**

• Operating temperature range	-55 to 80°C
• Shock	385 g
• Vibration	25 g peak sine, 20-2000 Hz

#### **Electrical**

• Input voltage	$\pm 13$ to $\pm 18$ VDC
<ul> <li>Quiescent current</li> </ul>	<16 mA per supply
• Quiescent power	<480 mW @ ±15 VDC

### **Physical**

• Weight	65 grams
• Size	1.0 in. dia. X 0.97 in. high
• Case Material	Stainless Steel

Additional product specifications, outline drawings and block diagrams, and test data are available on request.

#### **ISO-9001 Certification Since 1995**

For more information, please call **888-206-1667** or FAX **425-883-2104**. Visit our website at <u>www.inertialsensor.com</u> *Specifications are subject to change without notice.* 

