



AEROSPACE

Q-Flex® QA1500 Accelerometer

High-g tactical
navigation
sensor



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

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

Environmental

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

Electrical

- Input voltage ± 13 to ± 18 VDC
- Quiescent current < 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 www.inertialsensor.com

Specifications are subject to change without notice.

Honeywell