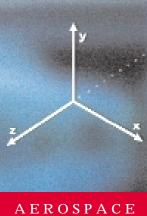
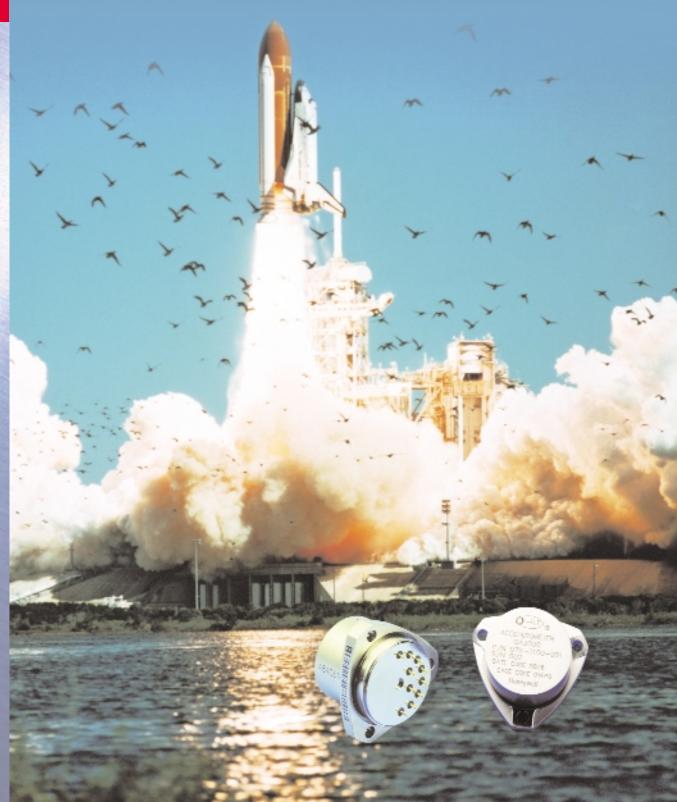
Honeywell



Q-Flex® QA3000 Accelerometer

Highest inertial navigation-grade performance



OA3000 Accelerometer

For the highest inertial navigation-grade performance available in today's market, Honeywell produces the Q-Flex® QA3000. Built on the same production line as the industry-standard QA2000 Accelerometer, the QA3000 Accelerometer has the same inherent quality, reliability, and long-term performance characteristics of the QA2000 Accelerometer. Primary applications include spacecraft navigation and control systems.

As with the entire Q-Flex family of accelerometers, the QA3000 features a patented Q-Flex etched-quartz-flexure seismic system. An amorphous quartz proofmass structure provides excellent bias, scale factor, and axis alignment stability.

The integral 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 QA3000 also includes a currentoutput, internal temperature sensor. By applying temperature-compensating algorithms, bias, scale factor, and axis misalignment performance are dramatically improved.

Features

- Highest performance accelerometer available
- Excellent turn-on repeatability and stability performance
- Environmentally rugged
- Analog output
- Field-adjustable range
- Three fastener precision mounting flange
- · Internal temperature sensor for thermal compensation
- Dual built-in test

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

Specifications

Performance

 Input range $\pm 60g$ Bias <4 mg

 Scale factor $1.33 \text{ mA/g} \pm 10\%$

 Resolution / Threshold $<1 \mu g$ >300 Hz Bandwidth

Environment

 Vibration 15 g peak sine, 20-2000 Hz

Electrical

 Input voltage ±13 to ±18 VDC <16mA

 Quiescent current <480 mW @ ±15 VDC

Quiescent power

Physical

 Weight 71 grams

 Size 1.0 in. dia. x 0.96 in. high

 Case Material Stainless Steel

Performance by Model

If other performance values are required, please contact Honeywell for special selection information.

(values listed are maximum)	QA3000-010	QA3000-020	QA3000-030
BIAS One-year repeatability	125 μg	80 μg	40 μg
SCALE FACTOR One-year repeatability	250 ppm	160 ppm	80 ppm
AXIS MISALIGNMENT One-year repeatability	1500 μrad 100 μrad	1000 μrad 80 μrad	1000 μrad 70 μrad
VIBRATION RECTIFICATION (50-500 Hz)	20 μg/(grms) ²	15 μg/(grms)²	10 μg/(grms) ²
TEMPERATURE	-55 to +95°C	-55 to +95°C	-28 to +78°C
SHOCK	150 g	150 g	100 g

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

ISO-9001 Certification Since 1995



Inertial Sensor Products Redmond

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