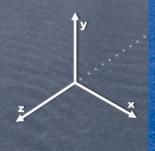
Honeywell



A E R O S P A C E

Q-Flex® QA650 Accelerometer

Economical

sensor

package

Q-FLEX® ACCELEROMETER P/N 979-0650-001 S/N 2 DATE CODE 9826 DATE CODE 9826 CAGE CODE 0/FPO CAGE CODE 0/FPO



QA650 Accelerometer

For Q-Flex technology in an economical package, Honeywell produces the QA650 for industrial grade applications including: automotive test instrumentation, braking system deceleration, bridge and building sway and tilt monitoring, industrial and robotic control, land vehicle navigation, subway and high-speed train ride comfort control, and offshore drilling platform motion monitoring.

As with the entire Q-Flex family of accelerometers, the QA650 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 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.

Robust design and quality assurance provides superior reliability.

Features

- Tactical navigation grade performance
- High value
- Environmentally rugged
- Analog output
- Compact design
- Built-in-test
- Field adjustable range

Applications

- Automotive test instrumentation
- Braking system deceleration
- Bridge and building sway and tilt monitoring
- Industrial and robotic control
- Land vehicle navigation
- Subway and train ride comfort control
- Offshore drilling platform motion monitoring

Specifications

Performance

• Input range	±30 g
• Bias	<15 mg
– One year repeatability	<2500 μg
– Temperature sensitivity	<100 µg/°C
• Scale factor	1.33 mA/g ±10%
– One year repeatability	<2500 ppm
– Temperature sensitivity	<200 ppm/°C
• Axis misalignment	<15 mrad
• Resolution/Threshold	<10 µg
• Bandwidth	>300 Hz
Environmental	
• Operating temperature range	-55 to 96°C
• Shock	100 g

• Vibration 25 g peak sine, 5-500 Hz

Electrical

 Input voltage 	±13 to ±18 VDC
• Quiescent current	<16 mA per supply
• Quiescent power	<480 mW @ ±15 VDC

Physical

• Weight	51 grams
• Size	1.0 in. dia. X 0.74 in. high
• Case material	Stainless steel

3 and 4 fastener mounting rings are available. 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*.



Inertial Sensor Products Redmond Honeywell 15001 N.E. 36th Street, P.O. Box 97001 Redmond, Washington 98073-9701

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