

DTS 6DX

6 Degree of Freedom Sensor Package

The DTS 6DX Sensor contains 3 linear accelerometers and 3 angular rate sensors in a compact and rugged package ideal for high acceleration and angular rate measurements. External connectors make cable replacement easy.

FEATURES

• Internal Sensors

- 3 axis accelerometer
 - Ranges available from ± 50 to 6000 g
 - All axes intersect at one point
 - Full bridge piezo-resistive design
 - DC response
 - Linearity (typical): $<1\%$
 - Transverse sensitivity (max): $\pm 3\%$
 - Excitation voltage: 2 to 10 V
 - Full Scale Output: ± 200 mV
- 3 axis angular rate sensor
 - Ranges available from ± 300 to 50000 deg/sec
 - MEMS element has DC response
 - Linearity (typical): $<1\%$
 - Excitation voltage: 4.9 to 14 V
 - Drift: 0.1 deg/sec/sec
 - Full Scale Output: ± 2 V nominal

• Connectors

- 16-pin micro circular connector per each 3 axis sensor with locking clip
- Mating connector available as pigtails or solder cups

• Enclosure and Mounting

- Enclosure: anodized aluminum
- Dimensions: 28 x 28 x 16.5 mm
- Weight: 26 grams
- Mounting holes: drilled through for 4-40 or M3



Compact Size: 28 x 28 x 16.5 mm

Weight: 26 grams

Extremely Rugged: 6,000 g shock rating

CALIBRATION

• Acceleration

- NIST traceable sinusoidal vibration

• Angular Rate

- NIST traceable rate table with stepper motor and encoder

• Re-calibration Services Available

APPLICATIONS

• Automotive & Aerospace

- Vehicle crash and rollover test
- Vehicle ride and handling
- Vibration

• General

- Angular motion
- Shock
- Vibration

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