

# 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  $\pm 20$  to 6000 g's
    - 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:  $\pm 200$  mV
  - 3 axis angular rate sensor
    - Ranges available from  $\pm 300$  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:  $\pm 2$  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 16.5mm
  - Weight: 26 grams
  - Mounting holes: drilled through for 4-40 or 3M



**Compact Size:** 28 x 28 x 16.5mm

**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