

APPLICATIONS

- Aerospace analysis
- Amusement ride testing
- Automotive safety
- Biomechanics
- Blast testing
- Embedded monitoring
- Helicopter & aircraft
- Impact testing
- In-dummy
- Injury investigation
- Parachute deployment
- Package testing: truck, air, ship & rail
- Pedestrian head & leg form
- Ride & handling
- Sports & safety equipment
- Vibration testing

PRODUCTS

DTS offers a full line of data acquisition recorders and sensors for dynamic, high shock testing.

6DX

6 Degree of Freedom Sensor Package



The rugged 6DX features 3 internal accelerometers and 3 angular rate sensors in a 28 x 28 x 16.5 mm package.

Features

- Incredibly compact and lightweight
- Ideal for high impact testing
- Includes 3 linear accelerometers: maximum range options from 50 to 2000 g
- Includes 3 angular rate sensors: maximum range options from 300 to 50k deg/sec
- Re-calibration services available, NIST traceable

The 6DX sensor from DTS conveniently packages 3 linear accelerometers and 3 angular rate sensors in a compact and rugged unit that is ideal for high acceleration and angular rate measurements. Accelerometer ranges are available up to 2000 g and angular rate sensor ranges are available up to 50k deg/sec to meet a variety of testing requirements.

Understanding the demands of rigorous testing environments, the 6DX features external connectors that make cable replacement easy.



Designed for high impact test environments, external connectors make cable replacement simple on the 6DX.

SERVICES

24/7 Worldwide Tech Support
Calibration & Repair Services
Application Support
Software Integration
OEM/Embedded Applications

OFFICES

Seal Beach, California USA
Novi, Michigan USA
Sydney, Australia
Shanghai, China
Zorge, Germany
Tokyo, Japan

Specifications

PHYSICAL

Size: 28 x 28 x 16.5 mm (1.10 x 1.10 x 0.65")
Weight: 26 g (0.917 oz)
Enclosure: Anodized aluminum
Mounting Holes: Drilled through for 4-40 or M3

ENVIRONMENTAL

Operating Temp.: -40 to +85°C (-40 to +185°F)
Humidity: 99%, non-condensing
Shock: 2000 g, any direction

SENSORS: ACCELEROMETER

Range : 3 axis, 50-2000 g options
Packaging: All axes intersect at one point
Sensor Type: Full bridge piezo-resistive design
Response: DC response
Linearity: <1% (typical)
Transverse Sensitivity: $\pm 3\%$ (max)
Excitation Voltage: 2-10 V
Full Scale Output: ± 200 mV

CONNECTORS

Type: 16-pin micro circular connector per triaxial sensor with locking clip
Mating Connector: Pigtails or solder cups available

CALIBRATION

Acceleration: NIST traceable sinusoidal vibration
Angular Rate: NIST traceable rate table with stepper motor and encoder
Calibration: Re-calibration services available

SENSORS: ANGULAR RATE

Range : 3 axis, 300-50k deg/sec options
Response: MEMS element with DC response
Linearity: <1%
Excitation Voltage: 4.9-14 V
Drift: 0.1 deg/sec/sec
Full Scale Output: ± 2 V nominal

Authorized DTS Representative:



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Specifications subject to change without notice.