

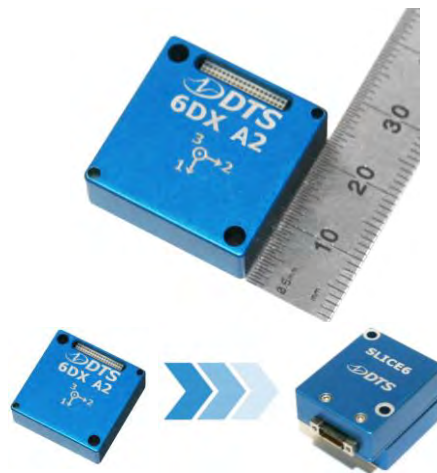
**New & Improved
for Global NCAP**
★Low Noise & Drift
★High Level Output

6DX A2

Rugged, 6 Degrees of Freedom Sensor Package
Direct-mount to SLICE6 or Standard Cable Solutions

APPLICATIONS

- Aerospace analysis
- Amusement ride testing
- Automotive safety
- Biomechanics
- Blast testing
- PMHS (cadaveric) 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



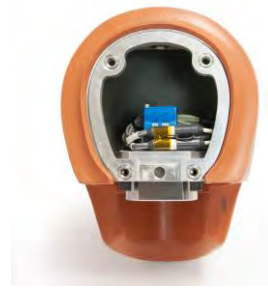
The miniature 6DX A2 measures high rates of acceleration and angular velocity and is designed for test articles with tight space constraints. The 6DX A2 mounts directly to the DTS SLICE6 data acquisition system via a built-in Nano-Strip connector which eliminates all sensor cabling.

Features

- Ultra-compact and lightweight
- Ideal for high acceleration and high angular rate measurements, as well as transit vibration and NVH
- NIST traceable, ISO 17025 accredited re-calibration services available
- Complies with NHTSA, FAA, ISO 6487 and SAE J211 recommended practices
- Available in multiple range options

The 6DX A2 is the newest 6DOF sensor package from DTS featuring three linear accelerometers and three angular rate sensors in a rugged, ultra-small enclosure. The 6DX A2 supports a wide range of excitation voltages and delivers high level outputs with lower noise and drift. The 6DX A2 is designed to mount directly to the compact SLICE6 data acquisition system, completely eliminating sensor cabling. Using a cable adapter, the 6DX A2 can also be used with other data acquisition systems.

The 6DX A2 sensor is ideal for injury biomechanics, transit vibration testing, vehicle NVH and multi-axis vibration testing without the need for accelerometer arrays.



The 6DX A2 is ideal for Six Degrees of Freedom (6DOF) measurements in all Global NCAP ATDs, head and leg forms, as well as many other applications.

PRODUCTS

Diversified Technical Systems designs and manufactures data acquisition systems and sensors for experienced test professionals.

6DX A2 Part No.	Model	Triaxial Accelerometer Ranges	Triaxial Angular Rate Ranges (Bandwidth)	Common Application
13001-50090	500-8K-600	±500 g	±8000 deg/sec (600 Hz)	ATD
13001-50080	500-8K-2K	±500 g	±8000 deg/sec (2 KHz)	ATD
13001-50070	500-18K-2K	±500 g	±18000 deg/sec (2 KHz)	ATD

Specifications

PHYSICAL

Size:	24 x 24 x 9.5 mm (0.98 x 0.98 x 0.39")
Mass:	14 g (0.42 oz.) without cables
Enclosure:	Anodized aluminum
Mounting Holes:	Thru-holes for two M2.5 bolts

ENVIRONMENTAL

Operating Temp.:	-40 to +85°C (-40 to +185°F)
Humidity:	99%, non-condensing
Shock:	2000 g, any direction
IP Rating:	IP51

SENSORS: ACCELEROMETER

Range:	Triaxial, ± 500 g
Bandwidth:	0-5000 Hz, DC response
Excitation Voltage:	4.9-14 V, not proportional to excitation
Linearity - % FS:	< 1%
Transverse Sensitivity:	$\pm 3\%$ (max)
Current:	2 mA nominal per axis
Packaging:	All axes intersect at one point
Nominal Sensitivity:	4 mV/g
Zero Output:	± 200 mV

CONNECTORS

Direct Connect:	36 pin Nano-Strip, connects directly to SLICE6
Cable Adapter:	Standard: Adapter with cable splitter to six individual pigtails (3m) Optional: Adapter with cable splitter to six connectors of choice (3m or 50cm)

CALIBRATION – ISO 17025 ACCREDITED

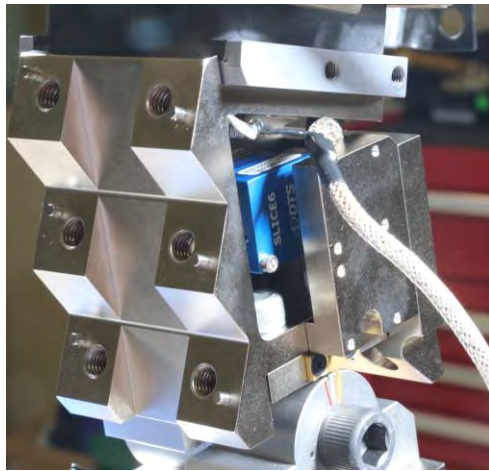
Acceleration:	NIST traceable shock, half-sine
Angular Rate:	NIST traceable rate table with stepper motor and encoder
Calibration:	Re-calibration services available

SENSORS: ANGULAR RATE

Range Options:	Triaxial, ± 8 K, 18K deg/sec
Bandwidth:	0-600 Hz or 0-2 KHz, DC response
Excitation Voltage:	4.9-14 V, not proportional to excitation
Linearity - % FS:	< 1%
Transverse Sensitivity:	$\pm 5\%$ (max)
Current:	4 mA nominal per axis
Full Scale Output:	± 2 V nominal
Zero Output:	± 200 mV

SERVICES

24/7 Worldwide Tech Support
ISO 17025 (A2LA) Calibration
On-site Calibration & Training
Application Support
Software Integration
OEM/Embedded Applications



Rugged and ultra-small, the 6DX A2 is designed to embed directly on or in the test article.



The 6DX A2 is ideal for dynamic applications with tight space constraints that require precision measurements.

WORLDWIDE SUPPORT

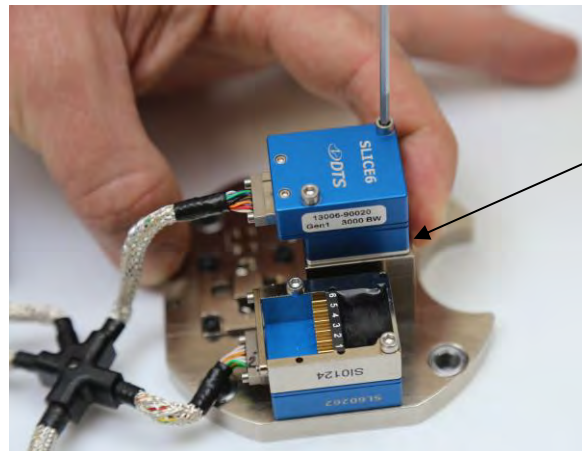
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Shown as part of a THOR in-dummy DAS integration, the 6DX A2 mounts directly to the SLICE6 data acquisition for a cable-free solution.

SLICE6 reduces in-dummy cabling and connectors by up to 75%.


www.dtsweb.com

Specifications subject to change without notice.
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