

The Next Generation in Angular Rate Sensors

The **DTS ARS** is the latest in intelligent design from **DTS**. With ranges as high as 12000 deg/sec, these incredibly small and lightweight sensors have a remarkable DC to 1650 Hz bandwidth. Suitable for many automotive, aerospace and industrial testing applications, the **DTS ARS** is used inside crash dummies, for missile and guided munitions testing, vehicle handling and rollover, and many other demanding test needs.

APPLICATIONS

- Automotive Safety Test
- Industrial Machine Test and Monitor
- Component Testing
- Biodynamic Research



Single axis **DTS ARS**
7.6 x 10.2 x 14.0 mm
<3.0 grams



DTS ARS triax package with
DTS mounting block.



A six-axis package is easily obtained by taking the **DTS ARS** triax package and mounting three Endevco 7264 or MSI 64 accelerometers.

PART NUMBER

SPECIFICATIONS

ADDITIONAL INFORMATION

ARS-300	±300 deg/sec range 0 to 100 Hz Response
ARS-1500	±1500 deg/sec range 0 to 1000 Hz Response
ARS-8K	±8000 deg/sec range 0 to 300 Hz Response
ARS-12K	±12000 deg/sec range 0 to 2000 Hz Response

- Ships standard with pigtail termination.
 - Options*:
 - c: add connector
 - cid: add connector and dallas id
 - Optional Ranges*: 300 to 50000 deg/sec
 - Optional Bandwidth*: 40 to 10000 Hz
- * additional lead time required



DTS ARS SPECIFICATIONS

Range and Frequency Response:

Range* deg/sec (rad/sec)	Bandwidth** (Hz)	Noise (RMS full scale)
300 (5.2)	DC to 100	<0.15%
1500 (26.2)	DC to 1000	<0.15%
8000 (139.6)	DC to 300	<0.15%
12000 (209.4)	DC to 1650	<0.25%

Electrical:

Excitation: 4.95 to 14.00 VDC; output not proportional to excitation

Current: 6 mA nominal

Zero Output: ± 200 mV

Full Scale Output: ± 2 V nominal

Performance:

Cross Axis Sensitivity: <1.0%

Linearity: <0.5% full scale

Influence of Linear Acceleration: 0.2 deg/sec/g

Drift: 0.1 deg/sec/sec

Physical:

Enclosure: Anodized aluminum

Size: 0.3 x 0.4 x 0.58 inches
7.6 x 10.2 x 14.7 mm

Mass: <3 grams

Shock: 2000 g, any direction

Cable:

- Four conductor, 28 AWG
- Overall shield isolated from enclosure
- Standard 25 ft (8.3 m)
- Color code
 - Black: -excitation
 - Red: +excitation
 - Green: +signal
 - White: -signal

Temperature Range: -40 to +85°C

Humidity: 99%, non-condensing

Connector: LEMO or other installed per request

Dallas ID: Installed in connector

Specifications may be revised without notice.

* Optional ranges up to 50000 deg/sec

** Indicates flat response in this frequency range. The 1500 deg/sec **DTS ARS** meets SAE Class 600 performance requirements. The 12000 deg/sec **ARS** meets SAE Class 1000. All **DTS ARS** sensors have DC response. Nominal frequency response for 1500 and 12000 deg/sec units are show below.

