Inertial Measurement Unit for Crash Test Applications



ASC IMU 6C.x

Piezoresistive Technology Amplified Output High Stability High Shock Resistance Small Size

Features

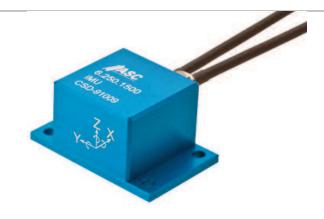
- Range Acceleration: 250g and 500g
- Range Gyro: 1500°/s
- Analog Output
- Low Noise
- Excellent Stability
- Small Aluminum Housing

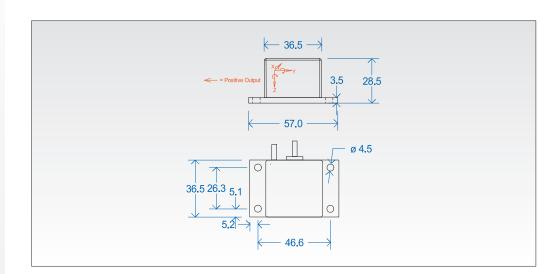
Options

- Customized Cable Length
- Customized Connector
- ASC-Teds Module
- Dallas ID Module

Applications

Automotive Crash Testing





Description

The **ASC IMU Crash** is based on MEMS Technology for gyros and accelerometers. Due to the MEMS Technology the sensor is very shock resistant. The **ASC IMU Crash** is usable for high shock and high rates applications like Crash Tests.

The **ASC IMU Crash** has a small and rugged housing and cable. The signals are amplified and temperature compensated. The **ASC IMU Crash** therefore has got a high stability. The signals are amplified and temperature compensated.

General Technical Data

Supply Voltage	8 VDC - 16 VDC
Current Consumption	max 9 mA/canal
Operating Temperature	0 °C to +60 °C
Storage Temperature	-20 °C to +85 °C
Dimensions	57 x 36 x 28 mm
Cable	2 x 6m shielded PUR cable
Mounting	4 pcs screws M4
Weight	80 gram without cable
Material Housing	Aluminum, blue anodized
Shock	500g Peek, 2 msec.

Individual Technical Data for Accelerometer

Range	+/- 250g	+/- 500g
Scale Factor	8 mV/g	4 mV/g
Signal	+/- 2000 mVDC	+/- 2000 mVDC
Offset	50 mVDC	50 mVDC
Linearity	<1 % FSO	<1 % FSO
Frequency Response	<2000 Hz +/- 5%	<2000 Hz +/- 5%

Individual Technical Data for Gyro

1500 °/sec
0.8 mV/°/sec
+/- 100 mVDC
200 Hz
0.005°/s/vHz
<0.5% FSO
+/- 50 mV

Calibration

- Sinusoidal Calibration for Acceleration
- Calibration for Angular Rate

Order Information ASC IMU 6C-XXX-YYYY-6A

- Model: ASC IMU Crash
- 2 Range Accelerometer: e.g. 250 is 250g
- 6 Range Gyro: 1500 is 1500 °/s
- @ Cable: Length in Meter
- Connector and Pinout / "A" is for No Connector

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