

ASC IMU 6.x

- Capacitive Technology
- Amplified Output
- High Stability
- High Shock Resistance
- Very Small Size

Features

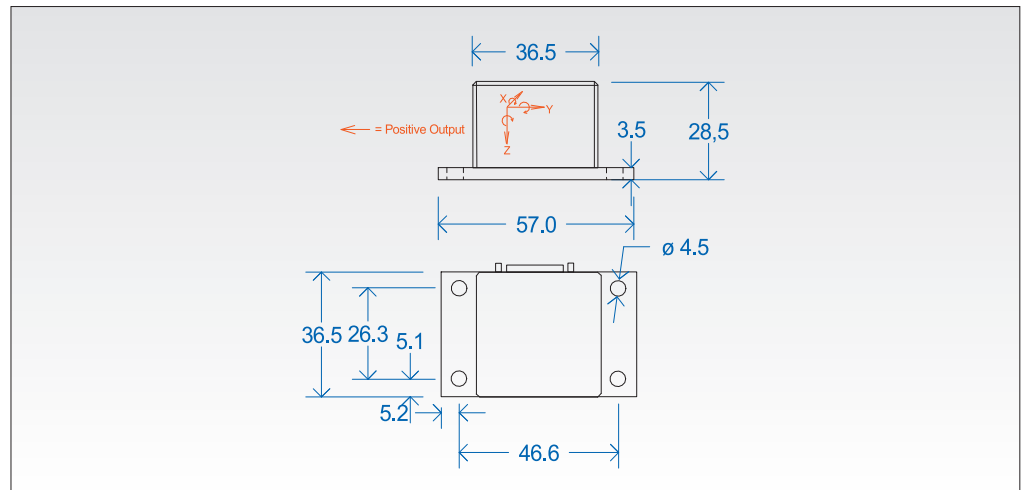
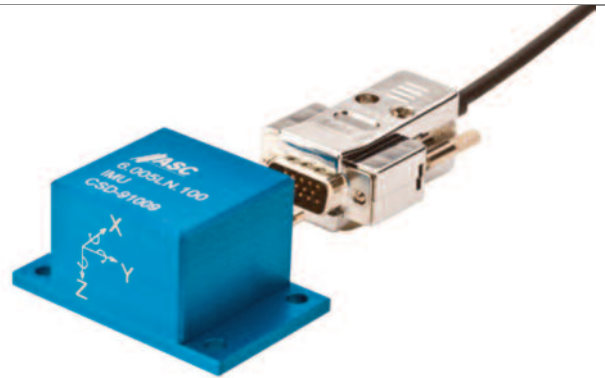
- Range Acceleration:
2g, 5g and 10g
- Range Gyro:
100°/s, 300°/s
- DC Response
- Excellent Bias Stability
- Analog Output

Options

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

Applications

- Road Testing
- Train Testing
- UAV
- Platform Stabilization



Description

The **ASC IMU** is based on MEMS Gyros and MEMS Accelerometers. Due to the MEMS Technology the sensor is very shock resistant as well as a stabil signal for the accelerometer and the gyro. The **ASC IMU** is usable for a wide variety of applications like UAV, platform stabilization, train and automotive test applications .

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

General Technical Data

Supply Voltage	8 VDC - 20 VDC
Current Consumption	20 mAV
Operating Temperature	-20 °C to +80 °C
Storage Temperature	-25 °C to +85 °C
Dimensions	57 x 36 x 28 mm
Cable	2m shielded PUR cable
Mounting	4 pcs screws M4
Weight	70 gram without cable
Material Housing	Aluminum, blue anodized
Connector Housing	Sub-D, 15 pin

Calibration

- Sinusoidal Calibration for Acceleration
- Calibration for Angular Rate

Individual Technical Data for Accelerometer

Range	+/- 2g	+/- 5g	+/- 10g
Scale Factor	1000 mV/g	400 mV/g	200 mV/g
Signal	+/- 2000 mVDC	+/- 2000 mVDC	+/- 2000 mVDC
Offset	2500 mVDC	2500 mVDC	2500 mVDC
Reference Voltage	2500 mVDC	2500 mVDC	2500 mVDC
Linearity	0.8 % FSO	0.8 % FSO	0.8 % FSO
Noise	18 µV/vHz	18 µV/vHz	18 µV/vHz
One Year Bias Stability	0.3 mg	0.75 mg	1.5 mg
Resolution	0.2 mg	0.35 mg	0.8 mg

Individual Technical Data for Gyro

Range	100 °/sec	300 °/sec
Scale Factor	2.5 mV/°/sec	3.6 mV/°/sec
Scale Factor over Temp.	+/- 5%	+/- 5%
Offset	1.35 VDC	1.5 VDC
Reference Voltage	1.35 VDC	1.5 VDC
Bandwidth	150 Hz	150 Hz
Noise	0.004°/s/vHz	0.005°/s/vHz
Linearity	<0.5% FSO	<0.5% FSO
Bias Output over Temp.	-3 mV +/- 2mV (0 °C to 60 °C)	1 mV/°C

Order Information

ASC IMU 6C-XXX-YYYY-6A

1 2 3 4 5

- 1 Model: ASC IMU 6.x
- 2 Range Accelerometer: e.g. 250 is 250g
- 3 Range Gyro: 1500 is 1500 °/s
- 4 Cable: Length in Meter
- 5 Connector and Pinout /
„A“ is for No Connector

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