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IMU Inertial Measurement Unit

Model BST IMU-M six axes

Features

- Anodized Aluminium Housing
- DC Response
- Damping 0.7
- Very low power consumption
- Low Mass

Application

- Automotive
- Truck
- Wind Energy
- Geology
- Marin

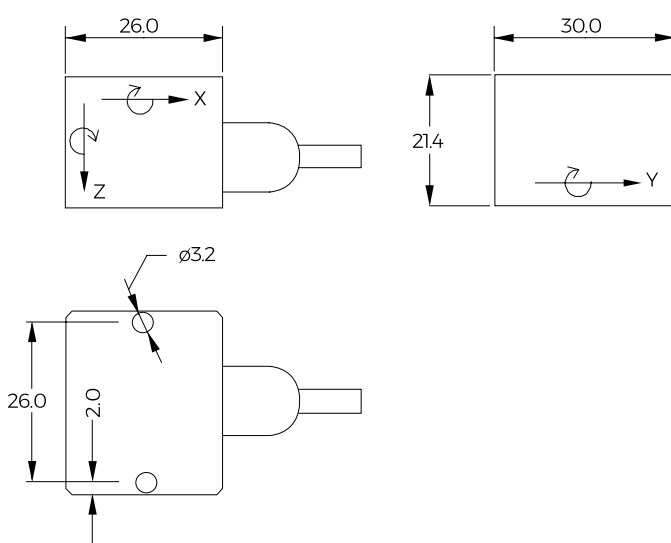
Description

The new model BST IMU-M is a multi-canal sensor with three accelerometers based on capacitive technology and three Gyros which helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult places for many test applications. Do to the anodized aluminium housing the mounting is easy with two screws M3. The sensor has 2m very high rugged, shielded and flexible PUR-cable.

As an option, we supply the sensor with connectors, TEDS and IP-67.

A calibration for the sensor is standard.

Dimensions



Specification Accelerometer

Range (g)	2	5	10	25
Sensitivity typ. (mV/g)	1000	400	200	80
Frequency response (Hz)	100	100	250	400

Specification Gyro

Range (°/S)	75	150	300	600
Sensitivity (mV/°/S)	26.7	13.3	6.7	5.0
Frequency Response (Hz)	50	50	100	100

Basic Specification

Supply voltage	7 to 28 VDC unregulated
Zero measurement output	+/- 2500 mV +/- 200 mV Accelerometer +/- 2500 mV +/- 200 mV Gyro
Thermal Shift Zero	< +/- 0.04 % FSO (0° to 50° C)
Thermal Shift Span	- 0.2 % /°C +/- 0.05 (0° to 50° C)
Power Consumption	10 mA / axis Gyro 8 mA / axis Accelerometer
Non-Linearity	< 1% of FSO
Transverse sensitivity	2% typ (3% max.)
Damping ratio	0.7 typ Accelerometer
Shock limit	1000 g
Operation Temperature	-20° to 80° C
Material	Aluminium, anodized
Dimensions	30.0 x 26.0 x 21,3 mm
Weight Housing	35 grams without cable, Option: IP67
Weight Cable	30 grams per meter
Cable	2m, 10 wires, shielded PUR, AWG 30

Cable Code

Accelerometer			
red = Supply +	black = Supply -		
white = Signal X	yellow = Signal Y	green = Signal Z	
Gyro			
red / grey = Supply +	black / grey = Supply -		
white/grey = Signal X	yellow/grey = Signal Y	green/grey = Signal Z	

Order information

BST IMU-M-005-300-2Z
 IMU-M = model name
 005 = Range 5g Accelerometer
 300 = Range 300°/S Gyro
 2 = 2m Cable
 Z = no connector