



MIMU

BS-IU10-M-D6EW

MEMS Inertial Devices and Systems

- ◇ Based on MEMS Process
- ◇ Digital Gyros & Accelerometers
- ◇ High Speed Processor Embedded
- ◇ Compensation & Calibration
- ◇ Low Power, Extra-small Size
- ◇ Robust for Vibration & Shock

Parameter	BS-IU10-M-D6EW		
Gyro Performance	Range	±450 °/s (can be extended to ±3600°/s)	○
	Bias (Full Temp.)	≤150 °/h	√
	Bias Stability(1σ, 10s on average)	≤12 °/h	√
	Bias Repeatability	≤12 °/h	√
	Nonlinearity	≤50 ppm	√
	Sensitive Axis Misalignment	10'	√
	Linear Acceleration Effect Any direction, 1σ	0.005°/s/g	√
Accelerometer Performance	Dynamic Range	±10 g	○
	Bias (Full Temp.)	≤5 mg	√
	Bias Stability(1σ, 10s on average)	≤0.3 mg	√
	Bias Repeatability	≤0.3 mg	√
	Nonlinearity	≤200 ppm	√
System Performance	-3 dB Bandwidth	150 Hz	○
	Output Data Rate	1000 Hz	○
	Weight	≤30 g	○
	Size	22.4 mm × 22.4 mm × 9 mm	○
	Supply Voltage	5±0.3 V	○
	Power Consumption	0.15 W	○
	Shock Resistance	≥2000 g	○
	Vibration Level	≥20 g rms	○
	Operating Temp.	-45°C~+85°C	○
Storing Temp.	-55°C~+105°C	○	

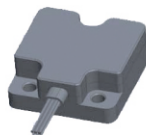
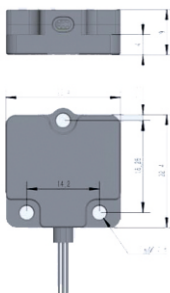
All values are typical at +23°C±2° C, -40°C,+85°C measured unless otherwise statement.

Note: √ means we will list this parameter performance value in our Test Report ; Totally 11 value in our Test Report ;
○ means we assure the parameter performance value when design, but not shown in our Test Report.

◇ Applications

- Integrated Navigation Systems & Inertial Guidance Systems
- Flight Control & Guidance Systems
- Attitude Heading Reference Systems (AHRS)
- Stabilization of Antennas, Cameras & Platforms

◇ Structure (unit:mm)



Color	Definition	Note
Red	VCC(+5V)	Power
Black	VGND	Power Ground
White	Rx+	Receive Positive
Brown	Rx-	Receive Negative
Green	Tx-	Transmit Negative
Yellow	Tx+	Transmit Positive