



MIMU

BS-IU9-M-D6EC

MEMS Inertial Devices and Systems

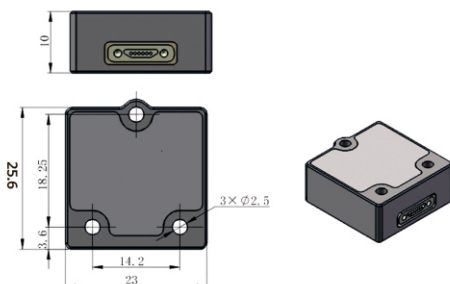
- ◇ Based on MEMS process
- ◇ Digital Gyros & Accelerometers
- ◇ High Speed Processor Embedded
- ◇ Compensation & Calibration
- ◇ Low power, Small Size
- ◇ High Tolerance

	Parameter	BS-IU9-M-D6EC
Gyro Performance	Range	±450 °/s (Extendable to ±3600°/s)
	Bias in Full temperature	≤ 100 °/h
	Bias Stability	≤10 °/h
	Bias Repeatability(1σ)	≤8 °/h
	Scale Factor Non-linearity	≤50 ppm
	Sensitive Axis Misalignment	≤10 ′
	Threshold/Resolution	0.005°/s
	G-Sensitivity	0.01 °/s/g
	-3 dB Bandwidth	150 Hz (10~250Hz Adjustable)
Accelerometer Performance	Range	±15g
	Bias in Full temperature	≤2 mg
	Bias Stability(1σ, 10s on average)	≤0.2 mg
	Bias Repeatability(1σ)	≤0.2 mg
	Scale Factor Non-linearity(<1g)	≤200 ppm
	Threshold/Resolution	≤ 0.1 mg
	Sensitive Axis Misalignment	10 ′
		-3 dB Bandwidth
System Performance	Refresh Rate	1000 Hz
	Weight	≤30 g
	Size	23 mm×23 mm×10 mm
	Supply Voltage	5±0.3 V
	Interface	RS422
	Connector	JMC-1284Z2-JH
	Vibration Level	≥20 g rms
	Shock Resistance	≥2000 g
	Operating Temp.	-45 °C~+85 °C
Storing Temp.	-55 °C~+105 °C	

◇ Applications

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

◇ Structure (unit:mm)



ID	Definition	Note
1	VCC(+5V)	Power Positive
2	GND	Power Ground
3	Rx+	RS422 Receive Positive
4	Rx-	RS422 Receive Negative
5	Tx-	RS422 Transmit Negative
6	Tx+	RS422 Transmit Positive