



## MEMS Inertial Devices and Systems

### MIMU

### BS-IC8-M-D6EC

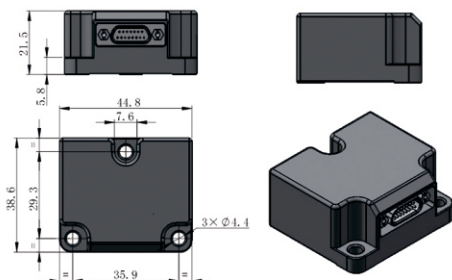
- ◇ Based on MEMS process
- ◇ Digital Gyros & Accelerometers
- ◇ High Speed Processor Embedded
- ◇ Compensation & Calibration
- ◇ Low power, Small Size
- ◇ High Tolerance

	Parameter	BS-IC8-M-D6EC
Gyro Performance	Range	±450 °/s (can be extended to ±4000°/s)
	Bias in Full temperature(1σ,10s on average)	≤100 °/h
	Bias Stability(Full Temp., 1σ,10s on average)	≤10 °/h
	Bias Repeatability(Full Temp., 1σ)	≤10 °/h
	Scale Factor Non-linearity	≤50 ppm
	Sensitive Axis Misalignment	10 ′
	Threshold/Resolution	0.005°/s
	-3 dB Bandwidth	150 Hz (10~250 Hz Adjustable)
	G-Sensitivity	0.005 °/s/g
Accelerometer Performance	Range	±50g (Extendable to 150g)
	Bias in Full temperature	≤10 mg
	Bias Stability(Full Temp., 1σ, 10s on average)	≤ 1 mg
	Bias Repeatability(Full Temp.,1 σ)	≤ 1 mg
	Scale Factor Non-linearity(±1g)	≤ 3000 ppm
	Threshold/Resolution	1 mg
	Sensitive Axis Misalignment	10 ′
	-3 dB Bandwidth	150 Hz(10~250 Hz, Adjustable)
System Performance	Data Rate	1000 Hz
	Weight	≤80 g
	Size	44.8 mm × 38.6 mm × 21.5 mm
	Supply Voltage	5±0.3 V
	Power Consumption	≤1.5 W
	Interface / Connector	RS422 / J30J-15ZKP
	Shock Resistance	≥2000 g
	Vibration Level	≥20 g rms
	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)



Top View & Side View

ID	Definition	Note
1	Tx-	RS422 Transmit Negative
2	Rx-	RS422 Receive Negative
3-5	NC	Blank
6-7	Reserved	Reserved
8	VCC(+5V)	Power
9	Tx+	RS422 Transmit Positive
10	Rx+	RS422 Receive Positive
11	NC	Blank
12-13	GND	Power Ground
14	NC	Blank
15	GND	RS422 Ground

Definition