



MIMU

BS-IC7-M-D6EC

MEMS Inertial Devices and Systems

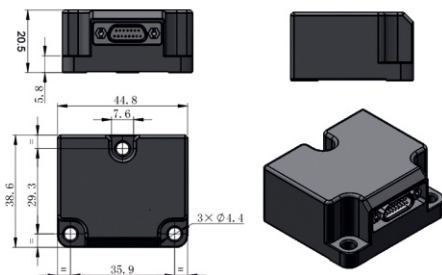
- ◇ Based on MEMS process
- ◇ Digital Gyros & Accelerometers
- ◇ High Speed Processor Embedded
- ◇ Compensation & Calibration
- ◇ Low power, Small Size
- ◇ High Tolerance

	Parameter	BS-IC7-M-D6EC
Gyro Performance	Range	±450 °/s
	Bias in Full temperature	≤100 °/h
	Bias Stability	≤8 °/h
	Bias Repeatability(1σ)	≤5 °/h
	Scale Factor Non-linearity	≤20 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	±15 g
	Bias in Full temperature	≤2 mg
	Bias Stability(1σ, 10s on average)	≤ 0.2 mg
	Bias Repeatability	≤ 0.2 mg
	Scale Factor Non-linearity(±1g)	≤ 100 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