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Shenzhen Rion Technology Co., Ltd.

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Applications

Product Details

Place Of Origin: China

Brand Name: RION

Certification: CE, FCC, ROHS, ISO

Model Number: IMU400-STD4

Payment & Shipping Terms

Minimum Order Quantity: 100pcs

Price: US\$29.50

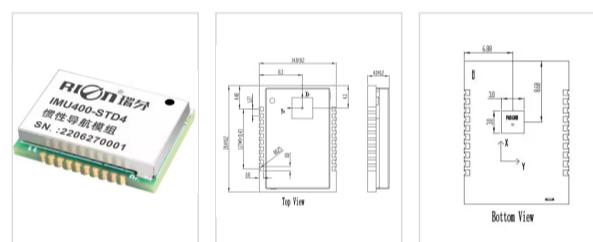
Packaging Details: Carton With Safety Sponge

Delivery Time: 5-10 Days

Payment Terms: T/T Or Paypal

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Specifications

Description

Specifications

Highlight: Professional Gyroscope IMU, Autonomous Driving Navigation IMU, IMU400-STD4 IMU

Resolution:	0.01°	Size:	L20.4×W14.8×H4.1mm
Coupling Error:	≤3.5'	Shell Material:	Magnesium Aluminum Alloy Anodizing
Heading Accuracy:	<1.5°	Operating Temperature:	-40°C To +85°C
Accelerometer Threshold:	≤1mg	Installation:	Four M4 Screws
Gyroscope Coupling Error:	≤3.5'	Accelerometer Accuracy:	1mg
Shock Resistance:	1000g	Application:	Marine Application
Weight:	1 Gram	Output Rate:	5Hz/15Hz/25Hz/35Hz/50Hz/100Hz Can Be
Bandwidth:	100Hz		

Description

IMU400-STD4 Professional Gyroscope IMU for Autonomous Driving Navigation Applications

IMU400-STD4 Professional Gyroscope IMU for Autonomous Driving Navigation Applications

► GENERAL DESCRIPTION

IMU400-STD4 is a professional gyroscope IMU for autonomous driving navigation applications, with built-in industrial-grade three-axis gyroscope and three-axis accelerometer. The product can still output smooth attitude data in the case of high vibration characteristics. Developed based on the MEMS inertial measurement platform, the dynamic attitude algorithm is performed on the angular rate of the gyroscope to real-time output the dynamic inclination angle, horizontal azimuth angle, triaxial angular rate, triaxial acceleration and forward axis acceleration of the object; Also through the Z-axis single-axis integral output and real-time feedback counting output, the front wheel of the carrier can be turned with a precise angle. This product is specially used for automatic driving navigation, precise operation, and efficiency. It is an essential component of the new generation of automatic precise navigation and driving control.

► KEY FEATURES

- ★ Horizontal azimuth angle & attitude angle output
- ★ Real time output angular rate
- ★ Light weight
- ★ Long life, strong stability
- ★ Forward axis acceleration output
- ★ All solid state
- ★ Compact & light design
- ★ TTL output
- ★ 3.3VDC power supply

► APPLICATION

- ★ AGV car
- ★ Disinfection robot
- ★ Precision agriculture autonomous driving

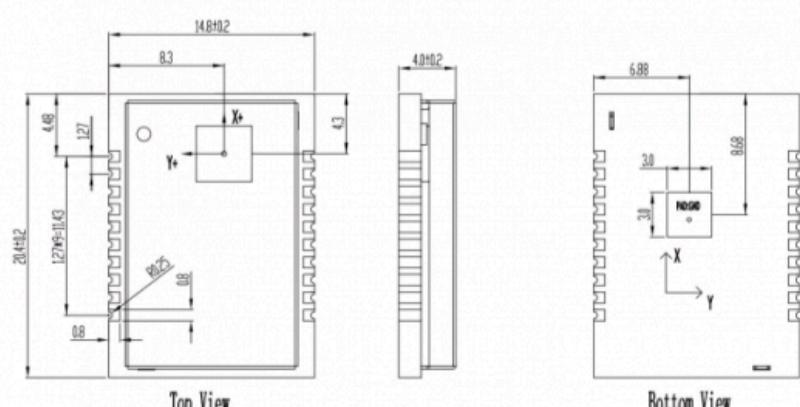
► SPECIFICATION

IMU400-STD4		Parameters
Triaxial attitude		Azimuth Angle ±180°, Roll ±180°, Pitch ±90°
Operational bandwidth		>100Hz
Resolution		0.01°
Nonlinear		0.1% of FS
Gyro	Triaxial gyro range	250°/s
	Bias instability(allan)	4.5°/h
	Angle random walk coefficient(allan)	0.25°/sqrt(h)
	Bias stability(10s mean value)	8.5°/h
	Gyro bias(@Temp. -10°C~+65°C)	±0.25°/s(RMS)
Accelerometer	Range	±4g / ±8g(optional)
	Resolution	0.001g
	Accuracy	Test conditions
	Bias instability(allan)	1mg
	Speed random walk coefficient(allan)	0.05mg
	Bias stability(10s mean value)	@4g range 0.015m/s/sqrt(h)
Starting time		0.15mg
Input voltage		500ms
Current		DC3.3V(Ripple<50mVpp)
Working temperature		70mA
Storage temperature		-40 ~ +80°C
Vibration		-40 ~ +85°C
Impact		5g~10g
Working life		200g pk, 2ms, ½ sine
Output rate		10 years
Output signal		5Hz, 15Hz, 25Hz, 35Hz, 50Hz, 100Hz can set
MTBF		3.3V-TTL
Impact resistance		≥98000 Hours/time
Anti vibration		100g@11ms, 3 Axial Direction (Half Sinusoid)
Weight		10grms, 10~1000Hz
		≤5g

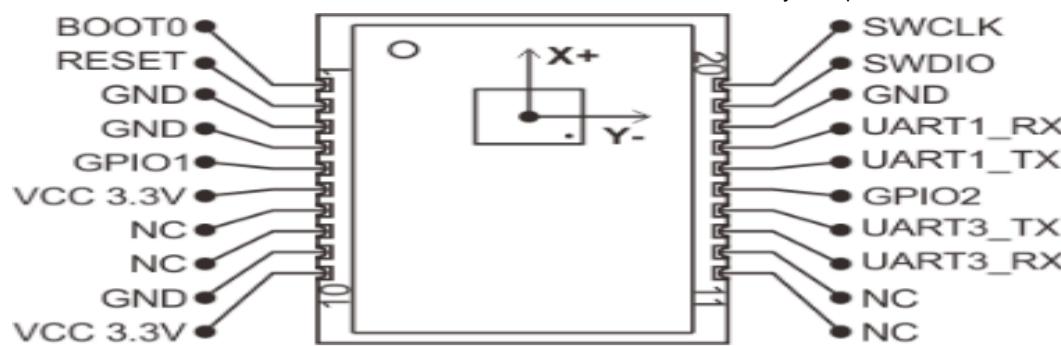


IMU400-STD4 INERTIAL NAVIGATION MODULE

► SIZE



Size : L20.4×W14.8×H4.1mm

**Tags:**

High Resolution mems imu sensor IMU MEMS Inertial Measurement Unit

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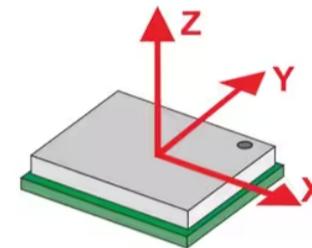
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Rion Imu400 9 Axis Inertial Navigation Module For
Automated Agriculture Machinery

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► Product axial diagram



Imu400 Multi Axis Inertial Navigation Module Ins Ttl
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