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## IMU406 Inertial Navigation Module Platform Attitude Accurate Measurement

**Product Details**

Place Of Origin: China

Brand Name: RION

Certification: CE, FCC

Model Number: IMU406

**Payment & Shipping Terms**

Minimum Order Quantity: 1pcs

Price: US\$32

Packaging Details: 1pcs In Each Inner Box , 80pcs In Each

 Shenzhen Rion Technology Co., Ltd. Alice@rion-tech.net 86-156-25295088



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[Specifications](#)      [Description](#)

**Specifications**

**Highlight:** Accurate Measurement IMU406, Platform Attitude IMU406, IMU406 Inertial Navigation Module

|                        |        |                      |                                   |
|------------------------|--------|----------------------|-----------------------------------|
| Operational Bandwidth: | >100Hz | Working Temperature: | -40°C~+80°C                       |
| Vibration:             | 5g~10g | 3 Axis Attitude:     | Azimuth±180° Roll ±180° Pitch±90° |
| Starting Time:         | 500ms  | Resolution:          | 0.01°                             |
| Gyro Measure Range:    | 250°/s | Current:             | 60mA                              |

**Description**

[IMU406 Inertial Navigation Module Platform Attitude Accurate Measurement](#)

**IMU406 inertial navigation module platform attitude accurate measurement**

**Product Description:**

IMU406 is a professional gyroscope IMU designed for precise measurement and control of platform posture, built-in industrial grade three-axis gyroscope and three-axis accelerometer .This product can still output smooth posture data even when the platform has vibrations. Developed based on the MEMS inertial measurement platform, the dynamic attitude algorithm is applied to the angular rate of the gyroscope to output real-time dynamic inclination angle, horizontal azimuth angle, three-axis angular rate, three-axis acceleration, and forward axial body acceleration data of the object; It can also be output

through Z-axis single axis integration and real-time feedback counting output; This product is specifically designed for precise control and operation of pan-tilt platforms, providing efficiency. It is an essential component for the new generation of automated posture precision control.

## **Features:**

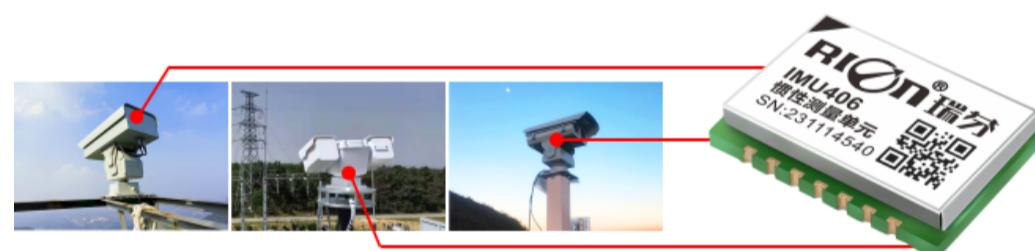
- Horizontal azimuth attitude angle output
  - Real time angular rate output
  - Lightweight
  - Long life, strong stability
  - Industry IMU sensor
  - All solid state

## Technical Parameters:

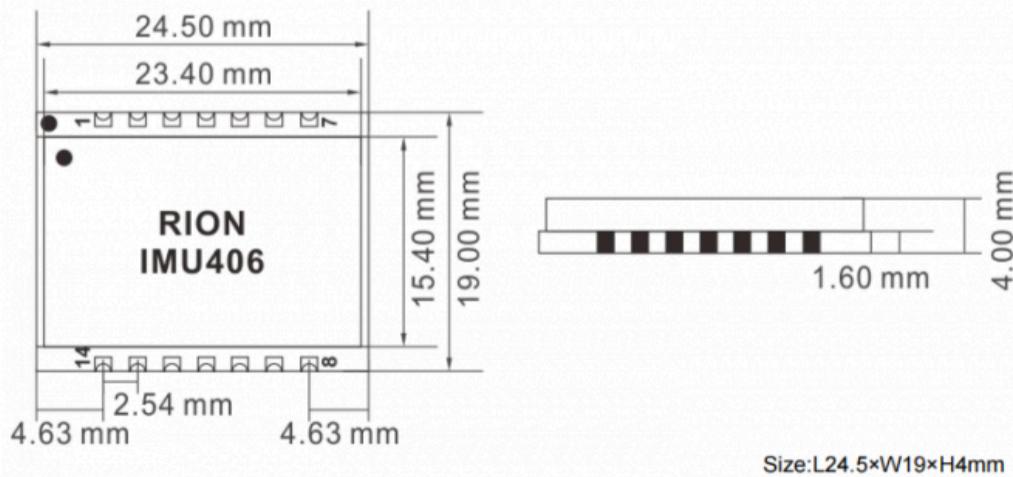
|  |   |                  |
|--|---|------------------|
|  IMU406 | PARAMETER   |                  |
| 3 axis attitude  | Azimuth±180° Roll ±180° Pitch±90°                     |                  |
| Operational bandwidth  | >100Hz  |                  |
| Resolution   | 0.01°   |                  |
| Nonlinear  | 0.1% of FS  |                  |
| 3 axis Gyro  | Measure range   | 250°/s           |
|  | Zero bias instability(allan)                          | 4.5°/h           |
|  | Angle random walk coefficient(allan)                  | 0.25°/sqrt(h)    |
|  | Zero bias stability(10s mean value)                   | 8.5°/h           |
|  | Gyroscopic bias(@Temp.-10°C~+65°C)                    | ±0.25°/s(RMS)    |
| 3 axis Accelerometer   | Measure range   | ±4g              |
|  | Resolution  | 0.001g           |
|  | Accuracy  | 1mg              |
|  | Zero bias instability(allan)                          | 0.05mg           |
|  | Speed random walk coefficient(allan)                  | 0.015m/s/sqrt(h) |
|  | Zero bias stability(10s mean value)                   | 0.15mg           |
|  | Test condition @4g                                    |                  |
| Starting time  | 500ms   |                  |
| Input voltage  | DC3.3V(ripple wave <50mVpp)                           |                  |
| Current  | 60mA  |                  |
| Working temperature  | -40 ~ +80°C   |                  |
| Storage temperature  | -40 ~ +85°C   |                  |
| Vibration  | 5g~10g  |                  |
| Impact   | 200g pk,2ms,½sine                                     |                  |
| Working life   | 10 years  |                  |
| Output rate  | 5Hz / 15Hz / 25Hz / 35Hz / 50Hz / 100Hz<br>Can be set |                  |
| Output signal  | 3.3V-TTL  |                  |
| MTBF   | ≥98000 hours /times                                   |                  |
| Impact resistance  | 100g@11ms,3 Axial Direction (Half Sinusoid)           |                  |
| Anti-vibration   | 10grms,10~1000Hz                                      |                  |
| Weight   | ≤15g(without cable )                                  |                  |

## Applications:

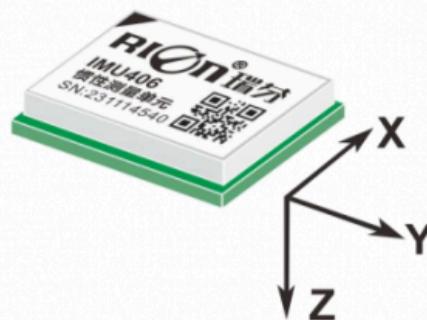
- ★ Precise measurement control of PTZ
  - ★ platform stability monitoring
  - ★ PTZ angle and attitude monitoring



## ► SIZE



### ► PRODUCT AXIS DIRECTION


**Tags:**

High Resolution mems imu sensor      IMU      MEMS Inertial Measurement Unit

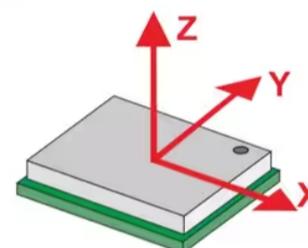
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