



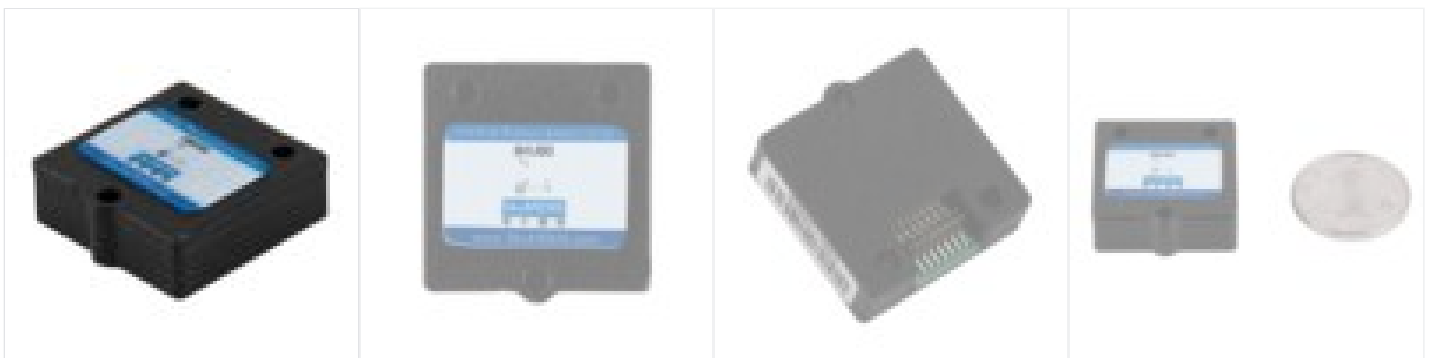
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High Performance Inertial  
Measurement Unit IMU80

(<https://www.skymems.com/products/high-performance-inertial-measurement-unit-imu80/>)



## High Performance Inertial Measurement Unit IMU80

- High Precision 6 DoF Mini IMU with Full Calibration
- Fully Compatible with ADIS16460, Better Performance
- 3 Angular Rates and 3 Linear Acceleration Outputs
- Data Output Rate: 200Hz

- Range: Gyro  $\pm 400^\circ/\text{s}$ , Accelerometer  $\pm 6\text{g}$
- Bias Instability: Gyro  $4^\circ/\text{h}$ , Accelerometer  $\pm 10\mu\text{g}$
- Compact and Light weight 23.4 x 22.4 x 7.4 (mm), <15g
- Wide Working Temperature:  $-40^\circ\text{C} \sim +85^\circ\text{C}$



Contact



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## Product Categories



## Brief Introduction

The High Performance Inertial Measurement Unit (IMU80) is a compact, high-precision device used for measuring acceleration, angular rate, and orientation. It is commonly used in a variety of applications, including aircraft navigation, robotics, and unmanned systems. The IMU80 integrates multiple sensors, including accelerometers, gyroscopes, and magnetometers, to provide accurate and reliable measurement data. It is designed to operate in harsh environments and is resistant to vibration and shock. The IMU80 is easy to install and can be easily integrated into a variety of systems. It is a reliable and cost-effective solution for a wide range of applications that require precise inertial measurement.

# Technical Specifications

## Typical Application

The High Performance Inertial Measurement Unit IMU80 is typically used in a variety of applications requiring high precision measurement of motion and orientation. Some common applications include:

1. **Aerospace and Defense:** The IMU80 is often used in aircraft, drones, and other aerospace vehicles to measure and control the position, attitude, and heading of the vehicle. It is also used in military vehicles and weapons systems to provide real-time navigation and targeting information.
2. **Industrial Automation:** The IMU80 is used in industrial robotics and automation systems to accurately measure and control the movement of machinery and equipment. It is also used in automated guided vehicles (AGVs) to ensure precise navigation and positioning within a factory or warehouse environment.
3. **Consumer Electronics:** The IMU80 is often used in consumer electronic devices such as smartphones, tablets, and wearable devices to measure and track the orientation and movement of the device. This enables features such as augmented reality, virtual reality, and motion tracking.
4. **Sports and Fitness:** The IMU80 is used in sports and fitness equipment to track and measure the movement and performance of athletes and fitness enthusiasts. It is also used in wearable fitness tracking devices to measure and monitor physical activity and progress.
5. **Medical and Healthcare:** The IMU80 is used in medical and healthcare applications to track and measure the movement and posture of patients, allowing for accurate diagnosis and treatment of conditions such as chronic pain, stroke, and Parkinson's disease.

## Product Advantages

## FAQ

Q: How long is the delivery time of the products?

A: Usually we have stock for every type of products, if the product that you selected we have in stock, then we only need to re-test it before leaving the factory, so the delivery time is around 1~2 days; if we don't have them in stock, then we need to arrange the production, the delivery time will be around 2 weeks. For the customer-oriented design products, our engineers will give the approximate delivery time according to the technical requirements.

Q: If needing to do the customer-oriented design product, what procedures will be followed?

A: If you want to do the customer-oriented design product, please contact with our pre-sale technical support engineer, or enter our ODM service in [skymems.com](https://www.skymems.com), and write down the technical requirements online, our engineers will contact with u asap after we get your requirements. Then we will clarify the technical specs together, and confirm the customer requirements together, then start to do the sample developing.

Q: How about the payment conditions?

A: we accept 30% prepayment in advance, and the balance 70% payment before the delivery. For the customer-oriented design product, the payment will be discussed together.

Q: How long is the product warranty?

A: Usually, our product warranty is one year. If you want to have longer warranty period, please contact with your sales manager to buy longer warranty service. Our products enjoy very high quality, and its MTBF is more than 100000hours.

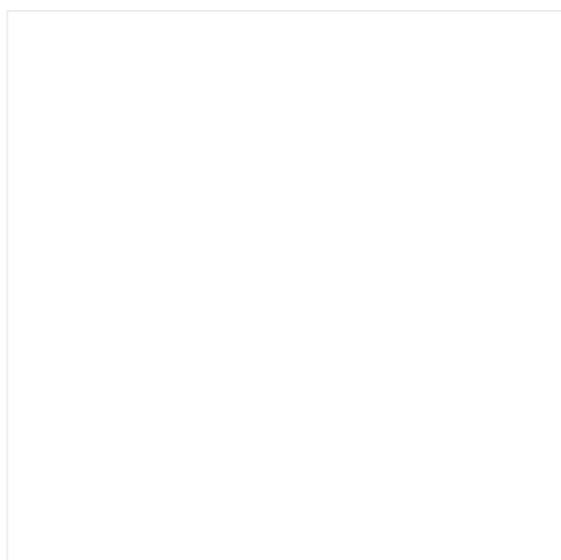
Q: How will we do if the product has the quality problem?

A: Our products have passed very strict tests before delivery, so it is very low probability to have quality problem. If our products have quality problem (not caused by man-made factors) in the warranty period, our factory will arrange the free repair. If the product can't repair well, we will arrange to provide a new one. If the product is out of warranty time, we will provide the repair only charging the material cost.

Q: What fast express will be adopted during shipping?

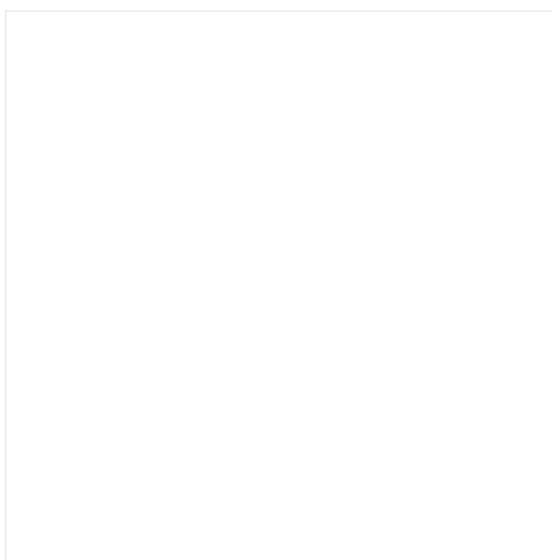
A: we will select fast expresses such as DHL, UPS, FEDEX, TNT etc. according to customer's requirements.

## Related Products



**IMU80 6DoF Mini IMU**

(<https://www.skymems.com/products/imu80>)



**IMU90 High Precision 6DoF Mini IMU**

(<https://www.skymems.com/products/imu90>)



**IMU188 I**

(<https://www.skymems.com/products/imu188>)

6dof-mini-imu/)

high-precision-6dof-mini-imu/)

miniatur

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### CateGories

- › Inertial Measurement Unit(/product-category/imu/)
- › Elctronic Compass(/product-category/e-compass/)
- › Fiber Optic Gyro(/product-category/fiber-optic-gyro/)

- [MEMS Accelerometer\(/product-category/mems-accelerometer/\)](/product-category/mems-accelerometer/)
- [Tilt Sensor\(/product-category/inclinometer/\)](/product-category/inclinometer/)
- [Integrated Navigation System\(/product-category/gnss-ins/\)](/product-category/gnss-ins/)

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[ODM\(/odm/\)](/odm/)

[QC\(/qc/\)](/qc/)

[Success Cases\(/success-cases/\)](/success-cases/)

## News

**What is a fiber optic gyro, and how does it work? (<https://www.skymems.com/what-is-a-fiber-optic-gyro-and-how-does-it-work/>)**

2026-02-05

**What is the difference between MEMS and piezo accelerometers? (<https://www.skymems.com/what-is-the-difference-between-mems-and-piezo-accelerometers/>)**

2026-01-23

**What is the difference between a fiber optic gyro and a ring laser gyro? (<https://www.skymems.com/what-is-the-difference-between-a-fiber-optic-gyro-and-a-ring-laser-gyro/>)**

2026-01-16

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