

## **Product Data Sheet**







Universal Data Logger with 9–Axis Sensor onboard Recording & Real– Time Streaming

# **Overview**

- Industrial-grade design suitable for harsh environments, ensuring reliable performance across a wide range of temperatures and conditions.
- 3-axis accelerometer.
- 3-axis gyroscope.
- 3-axis magnetometer.
- Low power consumption with high performance.
- The module offers 4 communication interfaces: Type C, UART, CAN, RS485.
- Maximum attitude output rate of 400 Hz(Default : 100 Hz) when integrating the accelerometer, magnetometer, and gyroscope.
- Embedded temperature sensor.
- Includes reverse bias protection and overvoltage protection measures.
- Compact footprint: 48.4 mm x 41.3 mm x 13 mm
- RoHS compliant.

# **Black diagram**



# Application

- AMR/AGV
- Robotics
- Automotive
- Drone
- Unmanned vehicle
- Teaching



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# Acgyma

# Specifications

Physical	
Size	48.4x41.3x13 (mm)
Weight	Approximately 20 grams
Connector	TypeC 2.54mm 10 Pin (Power,RS485,CAN,UART)
Performance	
Attitude Angle	Static Heading Angle: < 0.5° Static Roll/Pitch Angle: < 0.5° Dynamic Roll/Pitch Angle: < 1.0° Dynamic Heading Angle: < 1.0° Angle Resolution: 0.0055°

### Environmental

Operating Temp

-40 to 85 °C

#### Power

Voltage

4.75 to 5.4VDC (General 5V)

**Power Consumption** 

< 0.3W

### **Dimensions**



### Sensor

Accelerometer	Standard full range: ±16 g Resolution: 0.488 mg/LSB Static zero drift: ±80 mg Temperature drift: ±0.10 mg/°C Sensitivity tolerance: ±5 %
Gyroscope	Standard full range: ±500 dps Resolution: 17.5 mdps/LSB Rate noise density: 5 mdps/√Hz Static zero drift: ±10 dps Temperature drift: ±0.005 dps/°C Sensitivity tolerance: ±5 %
Magnetometer	Dynamic Range XY : ±1600 uT Dynamic Range Z: ±2500 uT Resolution: 0.3 uT/LSB



### **User GUI**

