

## EC336A High Accuracy 3D Digital Compass



- 3D angle output (Heading, Pitch, Roll)
- Hard and soft magnetic compensation, tilt compensation
- Heading accuracy: 0.3° RMS (25°C, tilt angle<30°)
- Pitch and roll accuracy: ±0.1° (25°C, full range)
- Wider input voltage: 5~24VDC (up to 36VDC)
- Interface: RS232 or RS485
- Widely working temperature: -40°C~+85°C
- Small size: L113\*20\*20mm

### Product Description

EC336A digital compass is a high-performance, low-power consumption, tilt-compensated electronic compass module that provides industry-leading heading accuracy. EC336A adopts hard and soft magnetic calibration algorithm, uses special calibration technology and provides high accuracy inclination signal, and it has perfect cross connect performance.

EC336A integrates 3-axis magneto-inductive sensors, 3-axis MEMS accelerometer and central processing unit to calculate the heading data in real time and compensate the heading when it has inclination angle. EC336A enjoys compact size, high accuracy, low power consumption, which is widely used in antenna pointing, vehicle, system integration fields.

- ✓ **12-Step Quality Control, Higher Reliability, More Functions**
- ✓ **Adopting Original Big Brand Component, High-class Glue Encapsulation**

- ✓ **Real Actual Precise after Calibration, Perfect Performance**
- ✓ **Successful Applications in Tens of Fields, More than 1000 Customers are Using**

### Typical Applications



High accuracy Platform



Platform Stabilization



Antenna Pointing



Ship Platform

## EC336A High Accuracy 3D Digital Compass

### Technical Specs

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Parameters	Value	Comments
<b>Heading</b>		
Range	0~360°	
Accuracy	0.3° RMS	25°C, tilt angle<30°
	0.5° RMS	25°C, tilt angle<60°
	1° RMS	25°C, tilt angle<85°
Resolution	0.1°	Deg RMS
<b>Tilt Angle</b>		
Range	roll: ±180°, pitch: ±85°	
Accuracy (full range)	0.1°	25°C
	0.5°	-40~+70°C
Resolution	< 0.01°	
Hard Iron Calibration	Yes	
Soft Iron Calibration	Yes	
Tilt Calibration	Yes	
<b>Electronical performance</b>		
Input voltage	5~24VDC	
Current	11mA@12VDC	
Power consumption	<0.2W	
Startup time	≤500ms	
<b>Environment condition</b>		
Working temperature	-40~+85°C	
Protection level	IP67	
<b>Communication protocol</b>		
Interface	RS232 or RS485	
Braud rate	2400~115200	settable
Maximum output speed	20Hz	ODM supported
<b>Physical parameter</b>		
Dimensions (L x W x H)	113*20*20	mm
Weight	80	g