

FNN-3400 Three-dimensional Electronic Compass

1. Profile

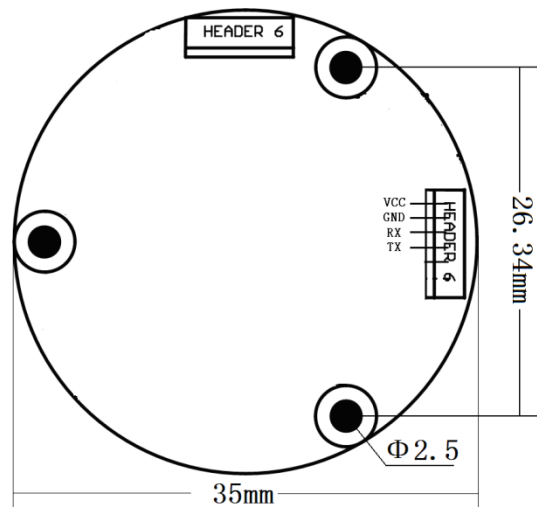
The accuracy of FNN-3400 built three-axis electronic compass and three-axis magnetic field sensor tilt sensor. Azimuth compass output is the angle between the horizontal plane of the projection axis north and magnetic north line on the ground projection, having a triaxial acceleration compensation due, in flat, Celi, an inverted attitude can measure magnetic north position, and can be widely used in mobile phone base station antenna detection, toys, teaching presentation equipment, low-cost satellite communications equipment, networking and testing needs.

FNN-3400 electronic compass magnetic interference can be hard or soft magnetic compensation, while having zero azimuth correction. Products with packaging and non-packaging of two types, operating temperature range: -20 °C to + 70 °C.

2. Main Parameters (RT test):

Characteristic	Condition	Min	Typical	Max	unit	
Supply voltage	Direct-current		5		V	
Working current		13	15	18	mA	
Settling Time			5		sec	
inclination	Measuring range		±60		°	
	Accuracy	Measuring range±15°		±0.2	±0.3	°
		Measuring range±30°		±0.3	±0.4	°
		Measuring range±45°		±0.4	±0.5	°
		Measuring range±60°		±0.5	±0.8	°
	Resolution			±0.05		°
	Linear	Measuring range±60°		0.8	1.3	%
	Repeatability			±0.2		°
	stability	Interval 24 hours		±0.3		°

	Thermal zero drift	Temperature range: -20 °C -70 °C		±0.02	±0.05	°/°C
	Cross-axis sensitivity error			±2	±4	%
position	Field range	Ambient magnetic field environment	-2		2	Gauss
	Accuracy	Tilt angle is less than 5°		±1	±1.5	°
		Tilt angle is less than 30°		±2.5	±3.5	°
	Resolution			±0.2		°
	Linear			±0.7	±1	%
	Repeatability			±0.4		°
	stability	Interval 24 hours		±0.8		°
	Thermal zero drift	Temperature range: -20 °C -70 °C		±0.04	±0.08	°/°C
Maximum magnetic interference⁺¹					20 Gauss	
Data update rate	Output continuous output	2	10	20	Hz	
Baud Rate	RS232、RS485、TTL		9600		Baud	
Communication parameters	RS232、RS485、TTL	9600, n, 8, 1				
storage temperature	Ambient temperature	-30		80	°C	
Operating temperature	Ambient temperature	-20		70	°C	
Protection class	Package (AHDH) *2		IP40		g	
weight	Package (AHDH) *2	55	60	65	g	
	Uncased (PCB35) *2	6	8	10	g	
size	Package (AHDH) *2	Length: 59 Width: 31 Height: 22			mm	
	Uncased (PCB35) *2	Diameter: 35 Height: 9			mm	



PCB board interface	RS232 interface	RS485 interface
	name	name
1	+5V	+5V
2	GND	GND
3	RXI	B
4	TXO	A
5		
6		