

# FNN-3200 Plane Electronic Compass

## 1 .Product Features

A.Through two-axis magnetoresistive sensor measures plane Earth's magnetic field, and translates the measurements into heading information.

B. High-speed and high-precision A / D conversion. The accuracy of magnetic field measurement is 100μGuass.

C. Embedded microprocessors calculate the angle between sensor and Magnetic North.

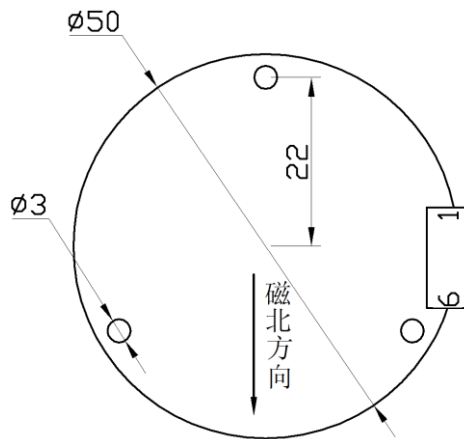
D.Operating temperature is -40℃to+85℃. Storage temperature is -55℃to+100℃.

## 2. Main Parameters (RT test):

Characteristic	Condition	Min	Typical	Max	unit
Supply voltage	Direct-current	4.5	5	5.5	V
Working current	Supply voltage = 5V	30	35	40	mA
Settling Time			5		sec
Field range	Ambient magnetic field environment	-2		2	Gauss
Accuracy	After user calibration		±1		°
Resolution			±0.2		°
Linear			±0.7	±1	%
Repeatability			±0.4		°
stability	Interval 24 hours		±0.6		°
Thermal zero drift	Temperature range -40 °C -85 °C		±0.04	±0.06	°/°C
Maximum magnetic interference <sup>+1</sup>				20	Gauss
Data update rate	Output continuous output		3		Hz

<b>Baud Rate</b>	RS232、RS485、TTL		9600		Baud
<b>Communication parameters</b>	RS232、RS485、TTL	9600,n,8,1			
<b>storage temperature</b>	Ambient temperature	-50		90	°C
<b>Operating temperature</b>	Ambient temperature	-40		80	°C
<b>weight</b>	Uncased (PCB50) *2	10	12	14	g
	Uncased (PCB35) *2	4	6	8	g
<b>size</b>	Uncased (PCB50) *2	Diameter: 50 Height: 18			mm
	Uncased (PCB35) *2	Diameter: 50 Height: 16			mm

**Note:** The work will not be damaged in the magnetic field inside the magnetic field sensor, for the normal operating range of less than  $\pm 2$  gauss products at 20 Gauss magnetic field environment can reflect the change, if you have to use the compass in such conditions We need to explain the product and factory special treatment.



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