



HFD2101-2

Integrated Anti-Jamming Satellite Navigation Receiver



Product Technical Manual



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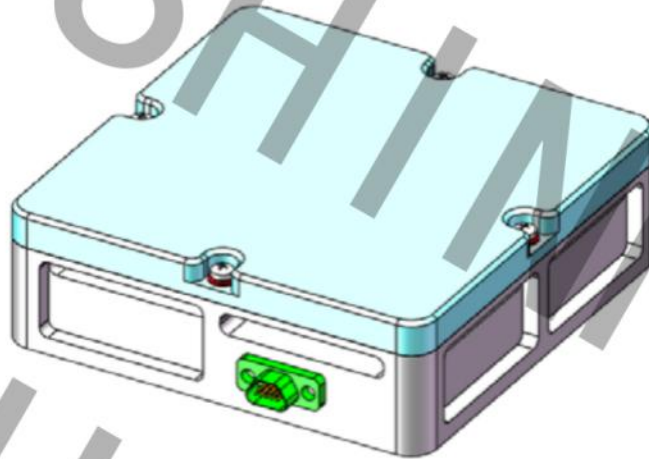
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1.Overview

HFD2101-2 integrated anti-jamming receiver is designed for jamming suppression in BDS-B1 and GPS-L1 frequency bands. It supports GPS + BDS B1 positioning and provides immunity against complex barrage jamming including broadband, pulse, narrowband and sweep jamming.



Integrated Anti-Jamming Satellite
Navigation Receiver Design Diagram

2.Features

- Low power consumption: High-integration chip design; total power consumption <10W.
- Lightweight: Integrated structure; total weight < 500g.



Integrated Anti-Jamming
Satellite Navigation Receiver

3.Applications

Suitable for fixed-wing UAVs, unmanned surface vessels and various vehicles. It ensures continuous and reliable positioning, velocity measurement and timing in intensive electromagnetic countermeasure environments.



Fixed-wing UAV

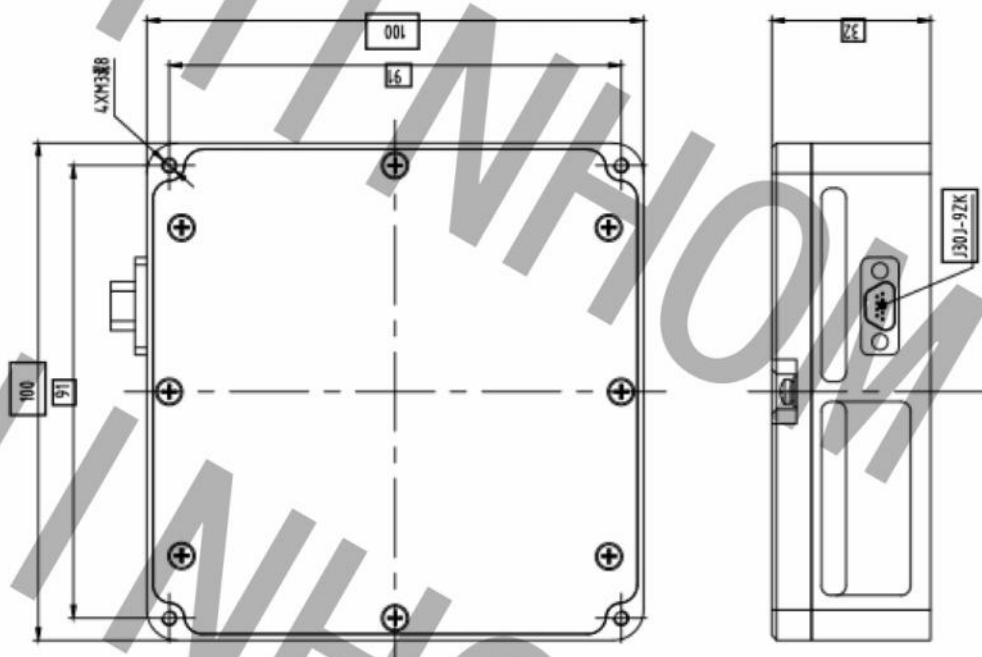
4.Technical Specifications

Item	Parameter
Receiving Frequency	GPS-L1, BDS-B1I/B1C
Positioning Accuracy	Horizontal:5m(1 σ);Vertical:10m(1 σ)
Velocity Accuracy	0.2 m/s (1 σ)
Positioning Update Rate	10 Hz
Anti-Jamming Performance	≥ 100 dB(single); ≥ 90 dB(triple)
Input Voltage	9~36 VDC
Power Consumption	≤ 10 W
Weight	≤ 500 g
Operating Temperature	-40 $^{\circ}$ C ~ 75 $^{\circ}$ C
Storage Temperature	-55 $^{\circ}$ C ~ 85 $^{\circ}$ C

5.Interface Definition

Pin	Description
1	VCC_IN: Power input 5V or 9 - 36VDC
2	VCC_IN: Power input 5V or 9 - 36VDC
3	GND: Ground
4	GND: Ground
5	RS422A_RX+: RS422 receive +
6	RS422A_RX-: RS422 receive -
7	RS422A_TX+: RS422 transmit +
8	RS422A_TX-: RS422 transmit -
9	NC: Not connected

6.Outline Dimensions



Anti-jamming Receiver Outline Dimensions

Dimensions: 100mm × 100mm × 32mm (tolerance $\pm 0.3\text{mm}$)