User Manual for Four-Element Integrated GNSS Anti-Jamming Terminal

V1.0

1. Product Overview



This product is a GNSS navigation anti-jamming antenna featuring lightweight design, high integration, and strong anti-jamming capability. It is suitable for airborne and vehicle-mounted applications.

Main Features:

- Supported Frequency Bands: GPS-L1, BDS-B1, GLONASS-L1, GALILEO-E1
- Number of Interference Sources Supported:** Four-element anti-jamming array, capable of suppressing up to three interference sources from different directions
- Anti-Jamming Performance:** 105 dB for single interference source; 90 dB for three simultaneous interference sources

2. Specifications

No	Item	Technical Specifications	Remarks
1.	Receiving	L1, B1, G1, E1	
	Frequency Bands		
2.	Anti-Jamming	L1、B1、G1、E1	
	Frequency Bands		
3.	Number of		
	Interference	Up to 3 directions	
	Sources		
4.	Anti-Jamming	single interference≮105dB、three	
	Capability	interferences≮90dB	
5.	Output Interface	RS422	
6.	Power Supply	9Vdc∼50Vdc	
	Range	7 v de - 30 v de	
7.	Rated Power	≤12.5W (at 28 VDC, room temperature)	
	Consumption		
8.	Weight	≤400g	
9.	Dimensions	130×130×17 (mm)	
10.	Operating	-40°C∼60°C	
	Temperature		
11.	Storage	-55°C∼85°C	
	Temperature	33 6 63 6	

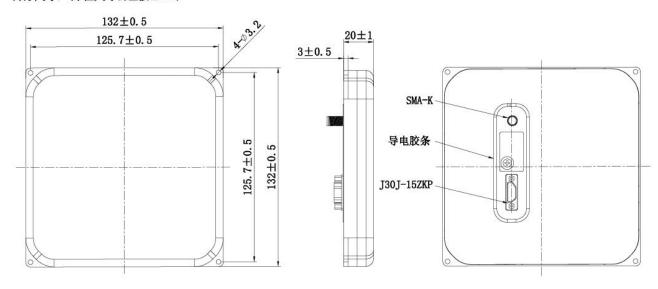
3. Structure

Dimensions: 130 mm $\,\times\,$ 130 mm $\,\times\,$ 17 mm (see the figure below for specific tolerances).

Weight: ≤ 400 g

Overall dimensions: (Unless otherwise specified, dimensional tolerance is ± 0.3)

外形尺寸: (未注尺寸公差按±0.3)



Outline and Mounting Hole Dimensions Diagram

4. Interfaces

RF Port: SMA-K

Socket Model: J30J-15ZKP

Matching Plug Model: J30J-15TJL AF250

Pin	Symbol	Direction	Function	Remarks
1	VIN+	Input	Power input	
2	VIN+	Input	Power input	9Vdc∼32Vdc
3	VIN+	Input	Power input	
4	RS422_TXP	Output	Data interface 1 TX positive	
5	RS422_TXN	Output	Data interface 1 TX negative	
6	RS422_RXP	Input	Data interface 1 RX positive	RS422
7	RS422_RXN	Input	Data interface 1 RX negative	
8	GND	Ground	Signal ground	
9	VIN-	Input	Power ground	
10	VIN-	Input	Power ground	
11	VIN-	Input	Power ground	
12	Reserved	-	Reserved	
13	Reserved	-	Reserved	
14	Reserved	-	Reserved	
15	GND	Ground	Signal ground	

5. Precautions

- ◆ The bottom surface of the device serves as the heat dissipation area. During installation, it should be connected to a structure with good thermal conductivity.
- ◆ During device installation, conductive adhesive strips should be applied around

the J30J connector.