

High-precision positioning control module

Manual



Catalogue

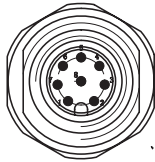
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1 Technical Parameter

Product Parameter	Processor	4 Nuclear cortex-A7
	Basic frequency	1.2GHz
	Internal storage	1GB
	Flash	8GB
Location parameter	Location Support	BDS/GPS/GLONASS/Galileo/QZSS
	Main Antenna Frequency Point	BDS: B1I、B2I、B3I GPS: L1C/A、L2P (Y)/L2C、L5 GLONASS: L1、L2 Galileo: E1、E5a、E5b QZSS: L1、L2、L5
	From the antenna frequency point	BDS: B1I、B2I、B3I GPS: L1C/A、L2C GLONASS: L1、L2 Galileo: E1、E5b QZSS: L1、L2
	Single-point positioning (RMS)	Level: 1.5 m Altitude: 2.5 m
	DGPS (RMS)	Level: 0.4 m + 1 ppm Altitude: 0.8 m + 1 ppm
	RTK (RMS)	Level: 0.8 cm + 1 ppm Altitude: 1.5 cm + 1 ppm
	First Location Time	Cold start <30 seconds
Enviromental parameter	Working temperature	-30~+70 °C
	Storage Temperature	-40~+80 °C
	IP grade	IP67
Software	Operating system	Linux
	Programming Language/Platform	QT
Function Parameters/ Interfaces	CAN	2 Road CAN
	RS232	1 Road
	WiFi	Support
Electrical Parameters	Service voltage	9~32V DC
	Power dissipation	≤ 5W
Physical Parameters	Way to install	Stent Installation
	Shell Material	Alufer
EMC	Antiplague performance against electrical transient effects along the power cable	GB/T 21437.2-2021 (ISO 7637-2:2011)
	Electrical transient immunity in cases where coupling does not occur via power cables	GB/T 21437.3-2021 (ISO 7637-3:2016)
	ESD	GB/T 19951-2019 (ISO 10605:2023)
	EFT	GB/T 17626.4-2018 (IEC 61000-4-4:2012)
Mechanical stress	Random vibration	GB/T 2423.56-2023 (IEC 60068-2-64:2019)
	Mechanical shock	GB/T 2423.5-2019 (IEC 60068-2-27:2008)
	Sinusoidal vibration	GB/T 2423.10-2019 (IEC 60068-2-6:2007)

2 Interface Definition

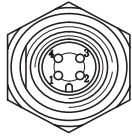
1、8P Connector (Power + CAN): M12 8P Male

Order number	Signal Name	Functional description	Product Interface Diagram
1	VBAT	Power Supply Positive	
2	VBAT	Power Supply Positive	
3	GND	Power Supply Negative	
4	GND	Power Supply Negative	
5	CAN1_H	CANH	
6	CAN1_L	CANL	
7	CAN2_H	CANH	
8	CAN2_L	CANL	

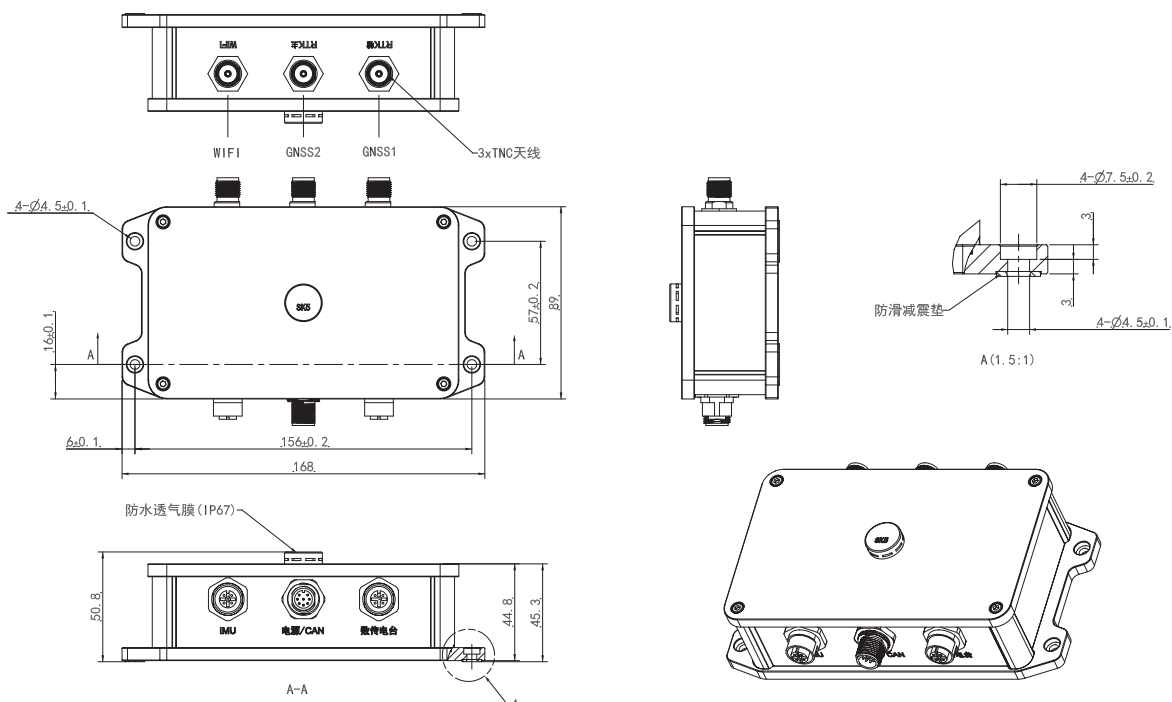
2、5P Connector (IMU): M12 5P Female Port (Reserved)

Order number	Signal Name	Functional description	Product Interface Diagram
1	PE	Protective Area	
2	VIN	9-32V output	
3	GND	Power Supply Location	
4	CAN2_H	CAN_BUS	
5	CAN2_L		

3、4P Connector (Data Radio): M12 4P Male Port (Reserved)

Order number	Signal Name	Functional description	Product Interface Diagram
1	VCC	Power Supply Positive	
2	RS232_TXD	RS232 Sender	
3	RS232_RXD	RS232 Receiver	
4	GND	The earth	

3 dimensional drawing



§15.19

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference,
- (2) this device must accept any interference received, including interference that may cause undesired operation.

§15.21

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form

§15.105

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator&your body.

Installation

The device is intended for installation in motor vehicles. During vehicle installation, the external antenna is mounted at the designated location and connected to the device via a TNC RF connector using the specified RF cable assembly. Antenna selection, mounting, cable routing, and device installation are performed by qualified installation personnel designated by the manufacturer in accordance with the installation instructions. Only antennas specified by the manufacturer are used for system installation. The antenna is not intended to be installed or replaced by end users during normal operation.