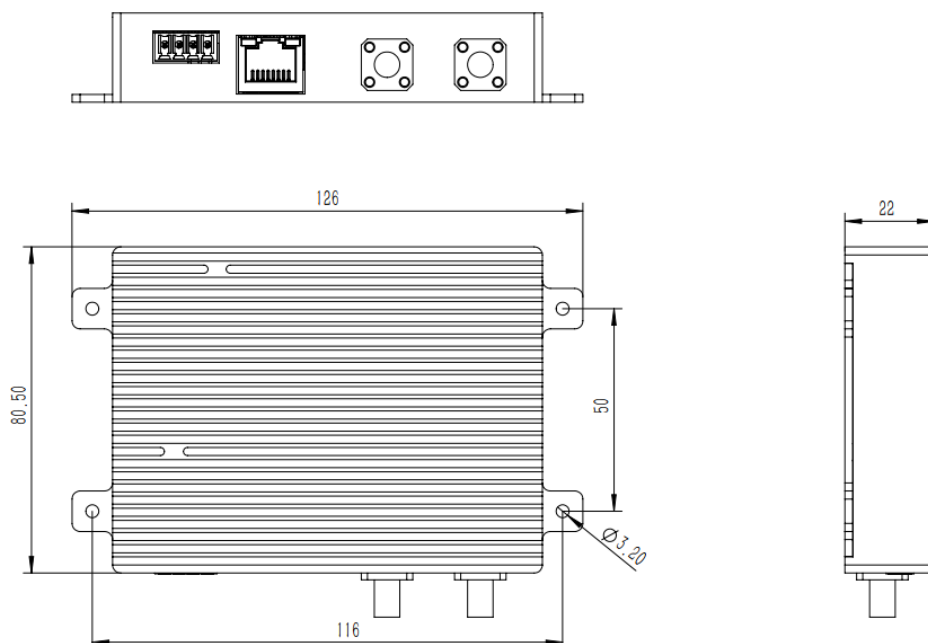


Small Size Navigation spoofer module Specification Sheet

一、 Function and Parameters

1. Support GPS/L1($1575.42\text{MHz}\pm 1.023\text{MHz}$)、
BDS/B1($1561.098\text{MHz}\pm 2.046\text{MHz}$)、 GLONASS/G1($1602\text{MHz}\pm 4\text{MHz}$)、
GALILEO/E1($1575.42\text{MHz}\pm 12.276\text{MHz}$)simulation;
2. Directional dispersal (dispersal conducted in a specified direction);
3. Navigation interference (disrupting the GPS positioning of drones);
4. Navigation forced landing ;
5. Circling function (forcing the drone to hover in mid-air);
6. Power output range: $-70\text{dbm}\sim +20\text{dbm}$ (default output 10dbm);
7. Power adjustment step: 1dB ;
8. Power-on initialization time: $<60\text{秒}$ (RMS)
9. Deceptive distance: $>1500\text{m}$;
10. Intrusion time: $<10\text{s}$;
11. communication information: UDP Protocol;
12. Receiving antenna interface: SMA-K;
13. Transmitting antenna interface: SMA-K;
14. power supply: $\text{DC}12\text{V}/1\text{A}$, industrial interface.
15. size: $12.6*8.05*2.2\text{cm}$ (Subject to the actual product.)

二、 Structural diagram, interface diagram, model diagram, and physical diagram





Physical object diagram

三、 Module Interface Description

1. Power supply and TTL level IO interface: This interface adopts an industrial 4P socket form, with specific definitions as shown in the following table:

Pin Number	Name	Description
12V +	Input power supply 12V positive terminal	Input power positive
12V -	Input power 12V negative pole	GND
IO 1 pin(TTL)	Ready indication (TTL level)	Steady on: The transmission conditions are met, mainly used to indicate the ready state after power-on Flash: Insufficient search satellites Slow flashing: Clock quality is abnormal
IO 2 pin(TTL)	Transmit indication (TTL level)	High level is the transmission signal, low level is the shutdown signal, which can be used as the power amplifier control terminal or transmission status indication

- 2.Receive: SMA-Kinterface, Used for receiving satellite navigation signals, this interface defaults to using an active receiving antenna (5VDC).
- 3.Transmit: SMA-K interface, for signal output, since the module has a built-in power amplifier, it is required that this interface be reliably connected to the transmitting antenna (passive) during use, and prolonged open-circuit conditions are prohibited when transmitting signals.