# GPS and GNSS Antenna Distributions System

# T208/T212/T216



- Shared GNSS antennas;
- Frequency Range:1150~1650MHz;
- Power failure RF keeps going
- Designed for 5G base stations

## Description

T2xx is a GPS antenna distribution tiny system, low power consumption, simple system without network management system,   it supports dual antennas input and 8/12/16 ports output for BBU system . Shared the two GPS timing antennas. T2xx is a splitter system for shared gps antenna for 5G BBU systems. It supports dual 48V DC inputs. Supply 4 ways dry contact outpouts. Designed for 5G BBU system.
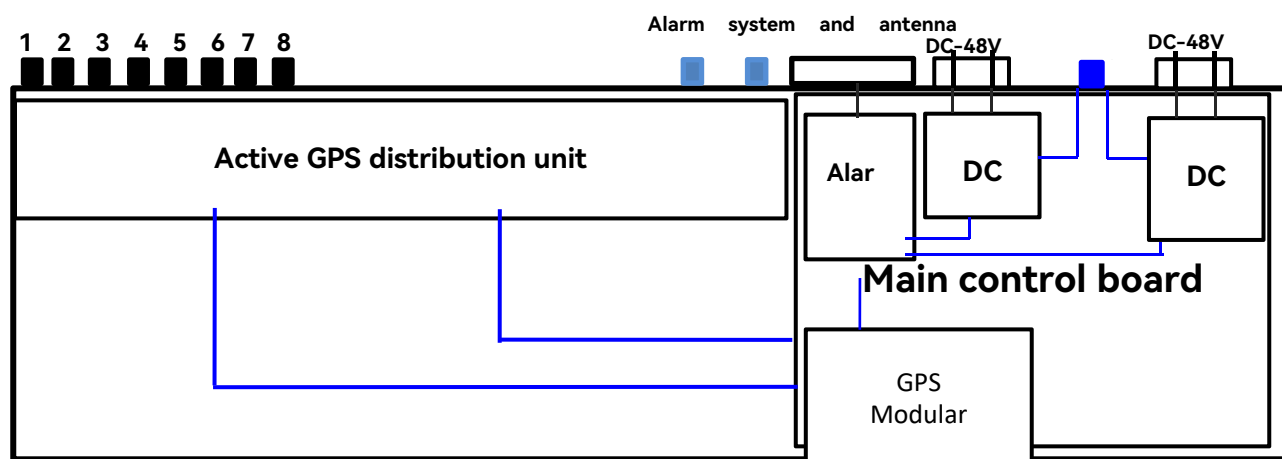
Power failure RF keeps going. In the event of a mains power failure, the system's RF link can operate normally as long as there is a receiver or BBU to access it.

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## Performance Parameter
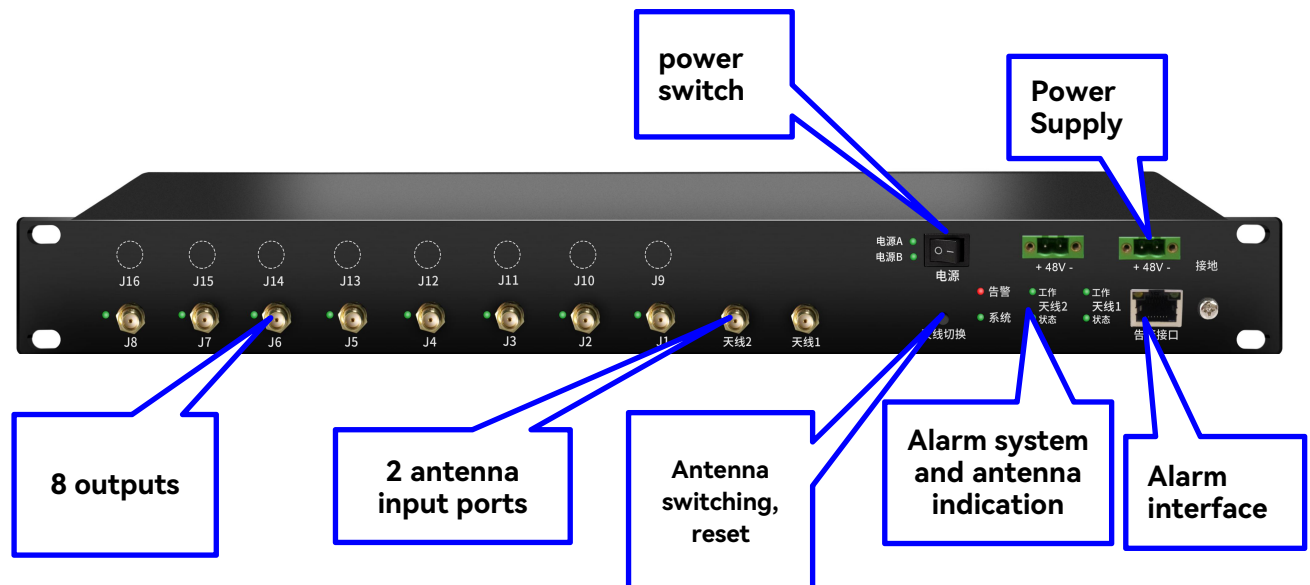
| | |
|---|---|
| Frequency Range（MHz） | Standard band: 1557.5~1587.5 |
| | Wide band:   1150~1650 |
| Gain（dB） | Overall Gain≥30±2; |
| Noise figure（dB） | ≤3 |
| VSWR | ≤1.5 dB　（Standard band） |
| | ≤2.0 dB　（Wide band） |
| Output power（dBm） | ≥-25 |
| Impedance（Ω） | 50 |
| Input Ports | 2　SMA-Female |
| Output ports | 8　　SMA-Female |
| Input Power | 30V~72V Isolated DC Power  2 Ways |
| Working power | 48V/≤200mA |
| Output Power From Input Ports | 5V/＜200mA |
| Dimension | 482.6mm ×96mm × 44 mm (D * W * H) |
| Net Weigh | 1.4KG |
| Working temperature | -20℃~70℃ |
| Storage temperature | -30℃~80℃ |

## Product block diagram and interface

## Interface description



**power switch**

**Power Supply**

**8 outputs**

**2 antenna input ports**

**Antenna switching, reset**

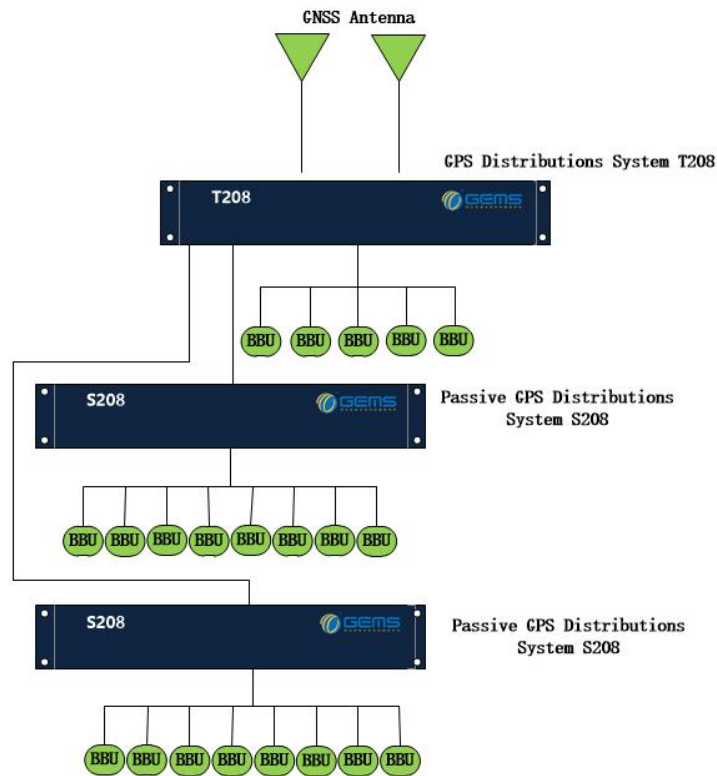**Alarm system and antenna indication**

**Alarm interface**

## Installation steps and instructions:

1. Install the equipment: Secure the side lugs on both sides of the front of the equipment to the equipment rack.
2. Connect the grounding wire.
3. Connect the GNSS antenna: connect antenna 1 and antenna respectively. 4.
4. Connect the power supply: Make sure the power switch of the device is off, and connect two pairs of 48V power supply respectively.
5. Turn on the power supply: Turn on the power supply, the power indicator light indicates that the power supply is normal;
6. Working indicator light indicates that the device is working normally; antenna status indicator light indicates that the antenna is working normally.
7. Connect the receiver or BBU or S2xx with RF cable.
8. Connect all the receivers that need to be accessed, long press the antenna switching button for 5 seconds, you can remember the state of the port that is now being accessed, when the state of the port is changed, the device will generate an alarm, the content of the alarm: buzzer sounds, dry contact alarm output alarm signal, long press the antenna switching button again for 5 seconds, the device again remembers the current state, the alarm disappears, and the system returns to the normal state.
9. Normal operation of the system: power supply A and power supply B are always on, status indicator of antenna 1 and antenna 2 are always on, system light is always on.
10. Various states of the indicator lamps:
1) Power supply A and power supply B indicator lights are always on indicating normal operation; a certain off indicates that the power supply has no power over or the power module is faulty.
2) Antenna 1 or antenna 2 work indicator light flashes, on behalf of the system works for automatic mode, when one of the antenna is disconnected all the way will be automatically switched to the other antenna
3) Antenna 1 or antenna 2 work indicator light is always on, on behalf of the system's working mode is manual, fixed use of a certain antenna, when the antenna is disconnected will not automatically switch to another antenna;
4) Antenna status light
The light is always on: the antenna access is normal.
Out: when the antenna is disconnected or when the antenna is faulty, it goes out.
5) System light:
Light is on: GNSS satellite signal is locked.

Lamp off: GNSS satellite is lost.

## Typical application：



## Product Size：

**Equipment Size：482.6mm ×96mm × 44 mm (D * W * H)**