

# **Passive GPS Distributions System**





#### Introduction

The Passive GPS Distributions System S208 realizes signal transmission by connecting the host. The BBU can directly feed 5V to the equipment without external power supply. It can be output to multiple BBUS through the built-in multi-channel distributor, so that multiple sets of BBUS of operators can share Beidou GPS signals, which can meet the requirements of Beidou GPS signals of multiple operators and multiple systems at the same time. The system has the characteristics of high reliability. When the connected BBU fails, the equipment indicator will go out and the dry contact alarm will generate an alarm.

At the same time, the device can be used with the GPS Distributions System or alone.

The device realizes multi-channel distribution by connecting the GPS Distributions System or antenna without external power supply. At the same time, it outputs GPS signals to 8-way GNSS receivers, such as BBUs.

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## Paramenters

Performance Index	
Working Frequency (MHz)	1557.5~1587.5
Gain (dB)	3±3dB
Noise Figure	<3
VSWR	≤1.5 dB
Impedance $(\Omega)$	50
Physical Parameters	
Number of GPS signal input ports	2(Antenna interface) SMA-Female Interface form
Number of GPS signal output ports	8 (Number of BBU device connections) SMA-Female Interface form
Input Voltage	Power can be supplied directly through BBU
Power Output via input ports	5V/50mA
Overall dimension	19 inches, 1U height

#### Main advantages:

- It can greatly reduce the use of main and auxiliary materials and engineering installation hours of Beidou GPS antenna feeder, reduce the cost by more than 50%, and effectively save the cost;
- Solve the problems of chaotic wiring and difficult maintenance caused by many Beidou GPS feeders;
- 3. Greatly reduce the requirements of the new BBU for the new sky space of Beidou GPS, and reduce the difficulty of property coordination;
- 4. Through the amplification of Beidou GPS input signal, the problem of limited distance of Beidou GPS feeder is solved.

#### Product block diagram and interface





**Interface Module:** 



### Installation instructions:

- 1. Fixed equipment: fix the side ears on both sides of the front end of the equipment on the equipment rack.
- Use with the host: connect the host to the equipment with soft jumper (SMA-j interface), which can supply power directly from BBU, with priority to 1 ~ 8 ports.
- 3. Connect the antenna directly: connect the antenna directly to two input ports and connect more than two BBUs to ensure power supply to the antenna.
- 4. Detect the output port signal: use the signal detector to detect the signal state of each output port.
- 5. Connect equipment and BBU equipment: connect the equipment output port with BBU equipment with soft jumper (SMA-j interface), and tighten the connector. The idle interface of the equipment does not need to connect the load, and it can be dustproof with a dust cap.
- 6. Debugging the equipment: first connect the output port of the host to the input port of the slave, and then connect the BBU to the output port of the slave. The indicator light on the port is on, which means that the equipment has started to work normally.
- 7. When the equipment interface is modified, the equipment will generate dry contact alarm. Press the reset key to restore the equipment to normal working state; If any input port fails, press the reset key to eliminate the alarm. Only when all input ports fail, the dry contact alarm will not be eliminated. At this time, the alarm can be eliminated as long as any input port is normal.



**Typical application** 



## **Product size**

Product size: 482.6mm  $\times$  77mm  $\times$  44 mm (D \* W \* H)

