

# GPS Digital Display Step Adjustable Amplifier



**JIETONG DIGITAL**  
GET CONNECTED

1200-1700 MHz

JTD-GLNA-1164-1616-30-DV

**GPS:L1,L2,L2C,L5; Glonass:G1,G2; Galileo:L1,E1,E2,E5(E5a,E5b),E6; Beidou2:B1,B2,B3; IRNSS:L1,L5; Omni Star**

- Applications: GPS Signal Indoor, Timing, Survey, Wireless Communication etc.
- Gain : 0~30dB, Digital display step adjustable .
- Response For
  - GPS:L1,L2,L2C,L5;
  - Glonass:G1,G2;
  - Galileo:L1,E1,E2,E5(E5a,E5b),E6;
  - Beidou2:B1,B2,B3;
  - IRNSS:L1,L5;
  - OmniStar
- Pass DC.

## Description

**JTD-GLNA-1164-1616-30-DV** is the latest launch of the single stage of the low noise amplifier, its technical characteristics are as follows:

1. Digital display gain: LED digital display, clearly display the current amplifier gain;
2. Touch-tone gain adjustment: through the upper and lower key, you can adjust the gain when needed;
3. Power control: toggle the power switch, easy control power supply state ;

Covers the GPS, Galileo, and GLONASS, Beidou 2 frequencies etc. The device features 30dB gain and a noise figure less than 3dB. Since the product consumes less than 20mA, the device can be placed in line with the receiver antenna and can be powered by the GPS receiver's antenna voltage output.

The **JTD-GLNA-1164-1616-30-DV** is more practical than any competitive product in the market.



# Specifications

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	In- Output ports, 50Ω	1.2		1.7	GHz
In &Out Imped	In, all output ports		50		Ω
Gain 1207MHz 1227MHz 1561MHz 1575MHz 1609MHz	In- Output ports -45dBm Input Level	(0~30)-1.5	0~30	(0~30)+1.5	dB
		(0~30)-1.5	0~30	(0~30)+1.5	
		(0~30)-1.5	0~30	(0~30)+1.5	
		(0~30)-1	0~30	(0~30)+1	
		(0~30)-1.5	0~30	(0~30)+1.5	
Input SWR				2.5:1	-
Output SWR				2.5:1	-
Noise Figure				3	dB
Gain Flatness				3	dB
Amp. Balance				0.5	dB
Phase Balance				1.0	deg
Group Delay Flatness				1	ns
Current	Pass DC, No Powered configuration, DC input on Out Port			250	mA
Max RF Input	Max RF input without damage			0	dBm

## Functional description:

Used to adjust system gain, 0-30 dB adjustable, Accuracy for 1 dB, Error of ± 1dB. you can control when needed.

With AC110~220/9V power adapter, supply power to system and itself.

①② are input/output, connect to cable assembly, N female (Can be customized).

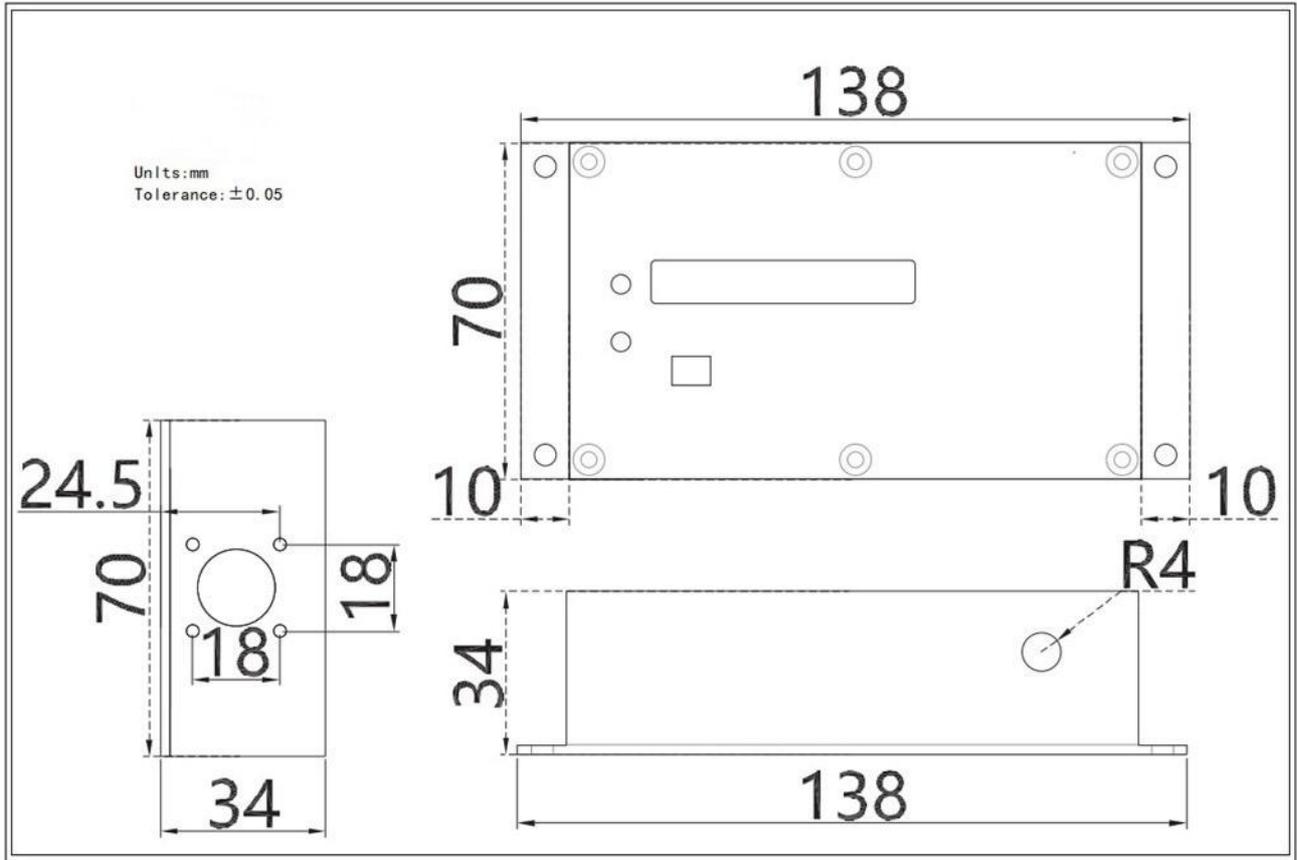
③ for power control switch. System power-on and reset (Gain reset to maximum 30dB) when allocated to upward, opposite, system stops working.

④ and ⑤ button to adjust the gain level. When system installed, generally, for this device, we usually from a maximum gain gradually adjust small, we can see the SNR of the receiver begin to weak, this point of gain will be the best choose.

⑥ is a LED, display the initial amplification value (level +30) when power-on.

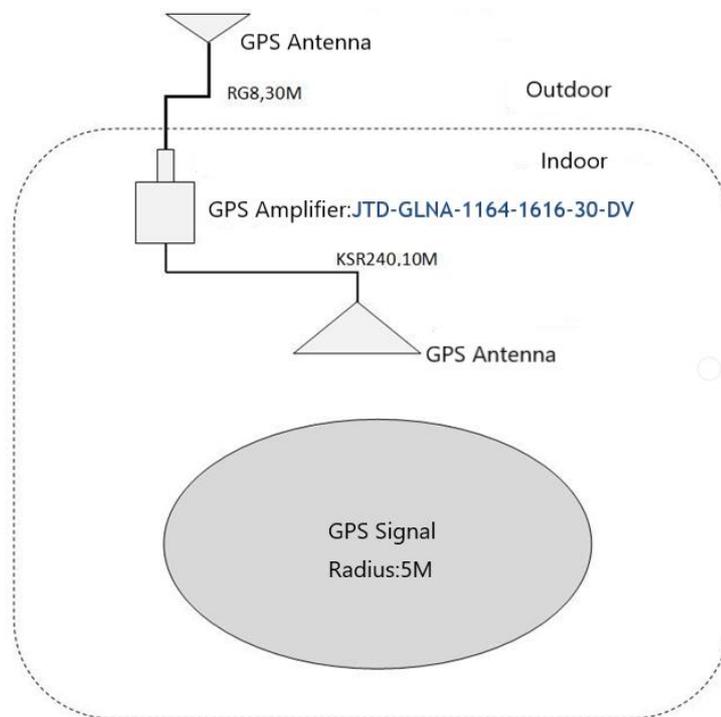
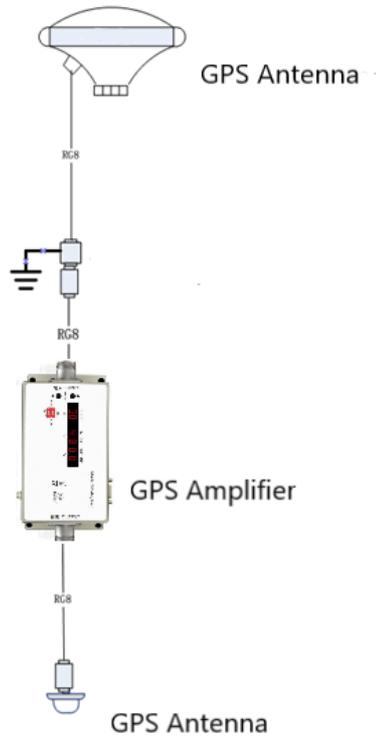


# Mechanical



# Applications

Expand GPS signal coverage or fill in GPS signal blind areas where GPS signals are weak or unavailable.



# Frequency Reference Table

Global/Compass Navigation Satellite Systems (GNSS/CNSS)	5				2				6/3		6				1													
Frequency (MHz)	1164	1176	1188	1192	1207	1215	1219	1227	1239	1245	1252	1260	1268	1277	1290	1535	1540	1545	1561	1569	1575	1581	1592	1602	1609	1616	2491	
GPS(USA) L1,L2,L2C,L5	L5+/-12					L2/L2C+/-12									L6+/-5					L1+/-12								
Galileo(Russia) G1,G2								G2+/-7																	G1+/-7			
Galileo(European) L1,E1,E2,E5(E5a,E5b),E6	E5+/-15											E6+/-12			L6+/-5				E2	L1+/-17				E1				
Compass (Beidou 2,China)			B2+/-10									B3+/-10							B1+/-2									
Beidou 1 (China,Tx(LHCP)/Rx(RHCP))																										L	S	
IRNSS (India)		L5+/-15																		L1+/-12							S+/-15	
OmniStar															0 +/-14→													