RGA30-DV

Rack-mounted GPS Digital display step adjustable amplifier

RoHS

- Applications: GPS Signal Indoor, Timing, Survey, Wireless Communication etc.
- Gain : 0～30dB, Digital display step adjustable .
- Digital gain: LED digital display, clearly shows the current amplifier gain.
- Serial command control.
- Input and output port power settings.
- 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

Description

RGA30 - DV is our latest rack-mounted 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;
4. Serial command control.
5. Input and output port power setting.

Cover GPS, Galileo, and GLONASS, Beidou2 frequencies etc. The device features 0-30dB gain and a noise figure less than 3dB. Since the product consumes less than 100mA, both the equipment and the receiving antenna are vertically mounted.

Specifications

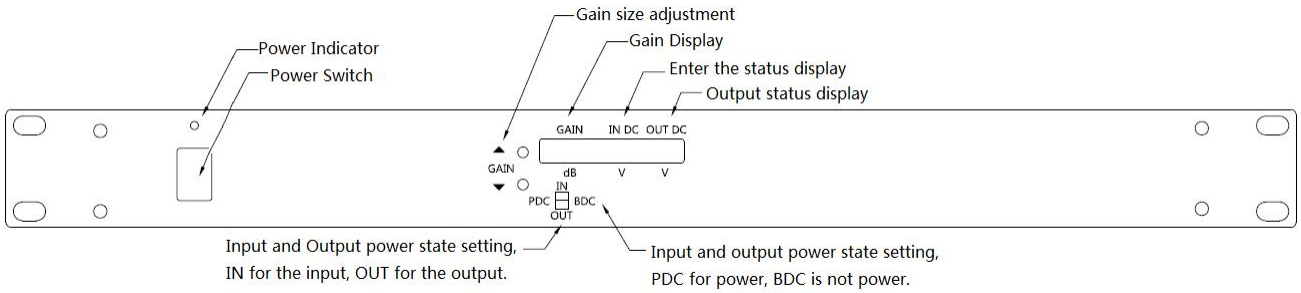
Electrical Specifications, Operating Temperature -40 to 85°c

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	In- Output ports, 50Ω	1164		16116	MHz
In &Out Imped	In, all output ports		50		Ω
Gain 1207MHz 1227MHz 1561MHz 1575MHz 1609MHz	In- Output ports -45dBm Input Level		0~30		dB
		(0~30)-1.5	0~30	(0~30)+1.5	
		(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, you can control when needed. The input and output can be set to energize 5V DC or not energized.

With AC220 power adapter, supply power to system and itself.



Gain Button: You can adjust the gain size , you can adjust the controller gain increase or decrease.

Digital Display: The display can be on the gain value, input status , output status display.
Input and Output power state setting, IN for the input. OUT for the output, PDC that power, BDC that is not power.

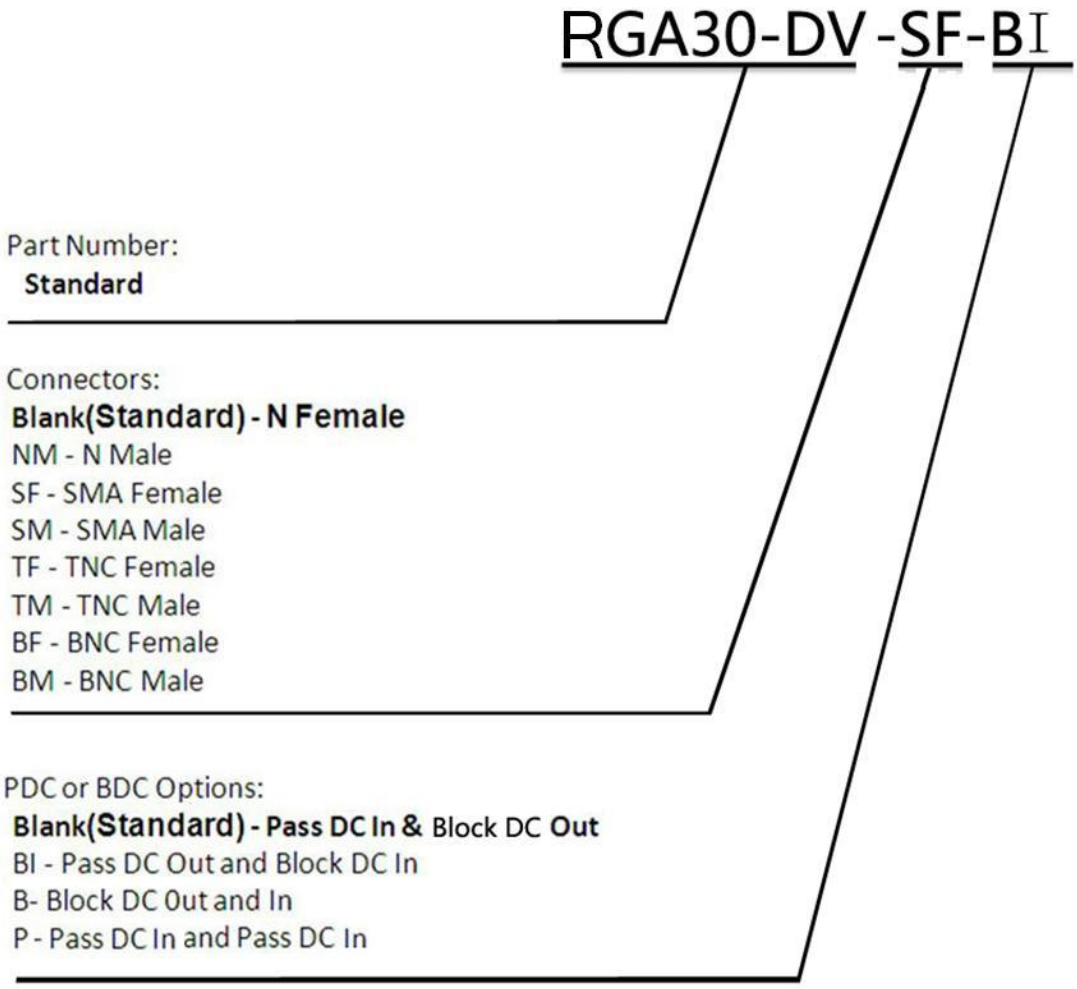
Performance Data

Gain :0dB

Gain :10dB

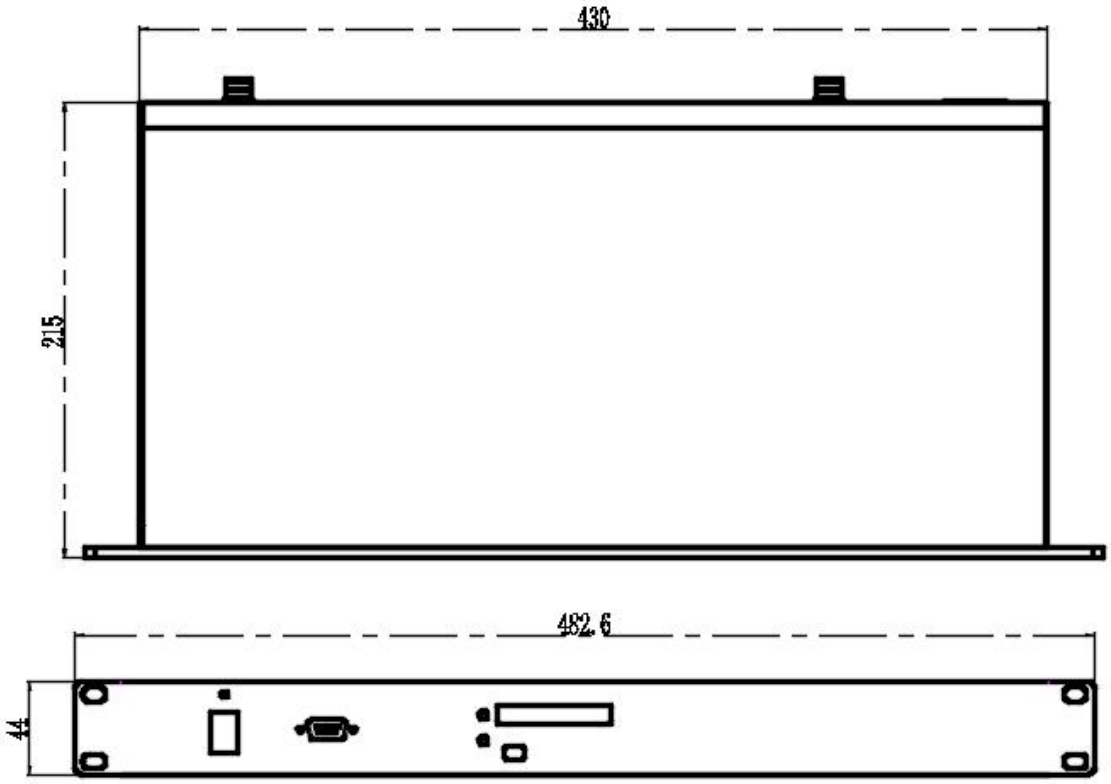
Gain :20dB

Order Informations And Available Options



Please contact us for more configurations and application supports. Email: Sales@gemsnav.com.

Mechanical



Frequency reference table

Gllobal/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	1259	1266	1268	1278	1290	1535	1540	1545	1550	1558	1558	1561	1563	1575	1587	1592	1602	1609	1616	2491
GPS(USA) L1,L2,L2C,L5	L5+/-12						L2/L2C+/-12												L6+/-5					L1+/-12						
Glonass(Russia) G1,G2										G2+/-7																		G1+/-7		
Galileo(Europian) L1,E1,E2,E5(E5a,E5b),E6	E5+/-15 E5a+/-12 E5b+/-12												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																	O+/-14---->														