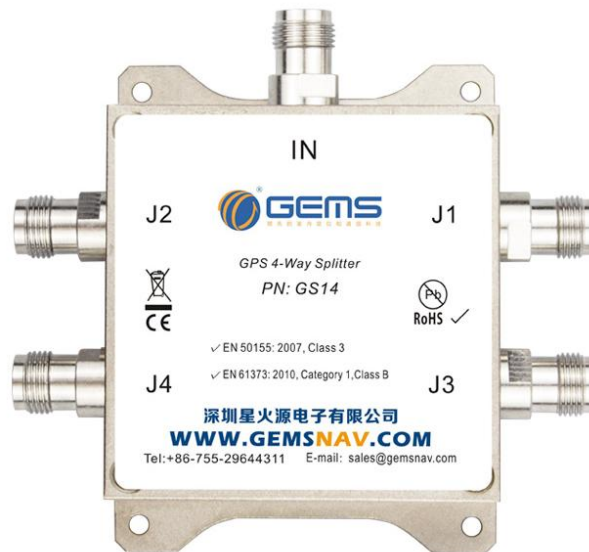


GS14

GPS Splitter



- Design For Wireless Infrastructure Applications
- Gain :0dB, 15dB , 21dB And Passive Version Available
- Frequency Range: 1150MHz~ 1650MHz
- Response For: GPS/GLONASS/Beidou/Galileo/IRNSS/QZSS/SBAS/NAVIC
- High Isolations

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Description

The GS14 GPS Splitter is a one-input, four-output GPS device. This product typically finds application where an input from an active GPS roof antenna is split evenly between four receiving GPS units. In this scenario, the GS14 can be configured to pass DC from an RF output (J1) to the antenna input port in order to power an active GPS antenna on that port. The second, third and fourth RF outputs (J2,J3, & J4) would feature a 200 Ohm DC load to simulate an antenna DC current draw for any receiver connected to those ports.

Specifications

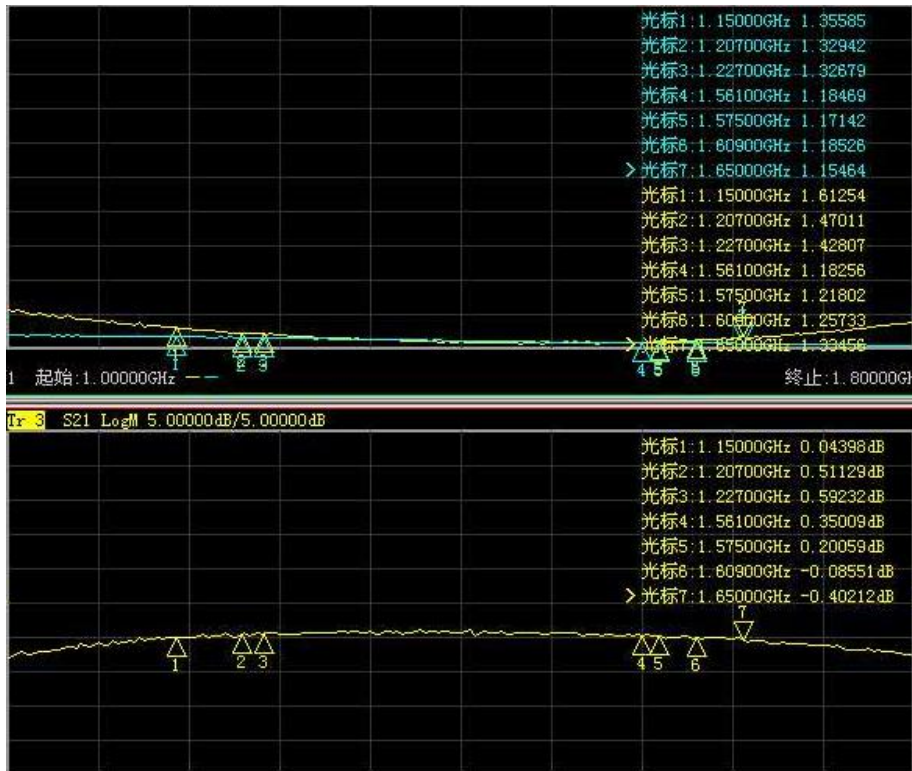
Parameter		Conditions	Min	Typ	Max	Units
Freq. Range		Ant – Any Port	1150		1650	MHz
In &Out Imped.		In, all output ports		50		Ω
Gain	0dB	In- Output ports, ,Unused Ports - 50 Ω	-1	0	1	dB
	Amplified(Normal)		19.5	21	22.5	
Loss, Passive		In- Output ports, ,Unused Ports - 50 Ω	6.5	7.5	8.5	dB
Input SWR					2.0:1	-
Output SWR					2.0:1	-
Nois Figure- Amplified					1.5	dB
Gain Flatness	Amplified				1.5	dB
	Passive				1	dB
Amp. Balance					0.5	dB
Phase Balance					1.0	deg
Group Delay Flatness					1	ns
Isolation	(Passive)	Unused Ports - 50 Ω	7			dB
	0~10dB	Unused Ports - 50 Ω	29			
	10~21dB	Unused Ports - 50 Ω	24			
DC IN		DC Block, All ports with a 200 Ω Load	3.3	5	16	VDC
		PASS DC, Amplified	3.3	5	16	
		PASS DC, Passive	3.3	3	16	
AC IN		Adapter Load		12		
Device Current					16	mA
Current		Pass DC, No Powered configuration, DC input on J1			250	mA
Operating Temperature			-40		85	$^{\circ}$ C
Max RF Input		Max RF input without damage			0	dBm
-Amplified					30	
-Passive						

RF Characterization Parameter Table

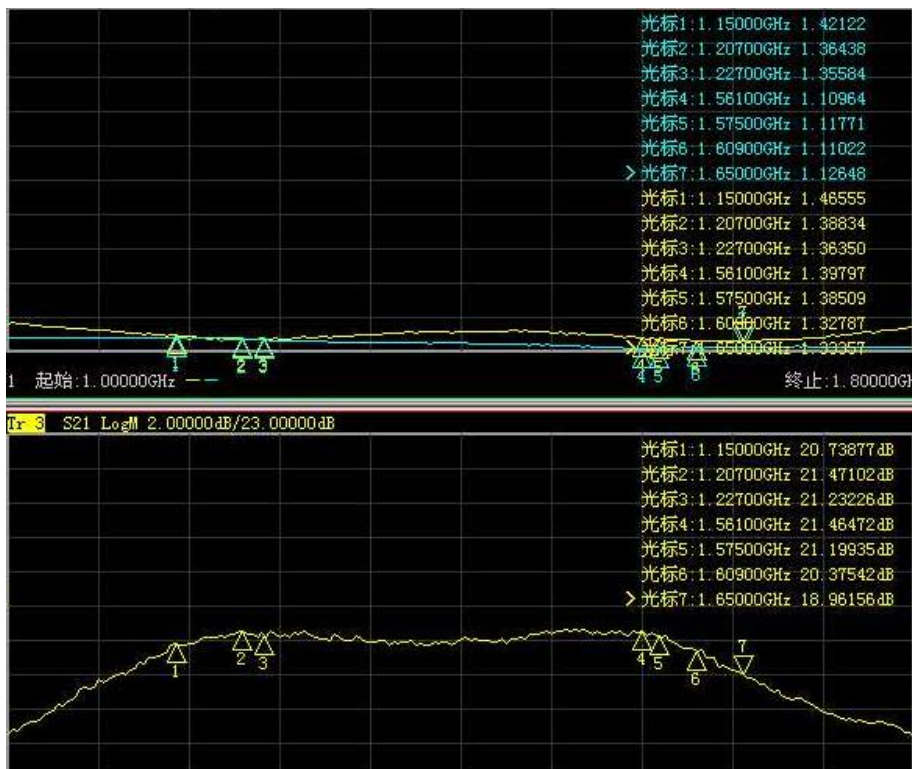
Frequency (MHZ)	Gain (dB)												Isolation (dB)					
	0				21				Total LOSS				0		21		Total LOSS	
	S-1	S-2	S-3	S-4	S-1	S-2	S-3	S-4	S-1	S-2	S-3	S-4	1-2	2-3	1-2	3-4	1-2	3-4
1150	0.0	0.0	-0.1	0.0	20.7	20.6	20.8	20.4	-7.4	-7.3	-7.5	-7.6	29	29	25	24	7	7
1176	0.1	0.1	-0.1	0.1	20.8	20.7	20.9	20.5	-7.4	-7.4	-7.5	-7.6	29	29	25	25	7	7
1207	0.5	0.5	0.0	0.4	21.5	21.6	21.2	21.2	-7.3	-7.2	-7.4	-7.4	31	31	27	27	7	7
1227	0.6	0.4	0.2	0.4	21.2	21.5	21.3	21.4	-7.2	-7.1	-7.4	-7.4	31	31	28	27	7	7
1268	0.4	0.3	0.2	0.3	21.2	21.4	21.2	21.3	-7.3	-7.2	-7.3	-7.3	32	40	28	28	7	7
1545	0.4	0.5	0.2	0.4	21.4	21.5	21.5	21.3	-7.5	-7.5	-7.6	-7.6	37	40	26	23	9	9
1561	0.3	0.5	0.2	0.4	21.5	21.6	21.5	21.3	-7.5	-7.5	-7.7	-7.7	37	40	26	23	9	9
1575	0.2	0.5	0.1	0.2	21.2	21.2	21.2	21.1	-7.6	-7.5	-7.7	-7.8	39	40	26	23	9	9
1609	0.1	0.2	-0.2	-0.2	20.3	20.4	20.2	20.4	-7.9	-7.9	-8.1	-8.1	41	41	26	24	10	10
1650	-0.4	-0.2	-0.6	-0.3	18.9	19.1	18.9	18.8	-7.9	-7.8	-8.1	-8.0	45	45	29	27	10	10

Frequency (MHZ)	VSWR															Noise(dB)		
	0					21					Total LOSS					0	5	21
	S	1	2	3	4	S	1	2	3	4	S	1	2	3	4	S	S	S
1150	1.6	1.4	1.3	1.4	1.4	1.5	1.4	1.3	1.4	1.4	1.6	1.5	1.4	1.5	1.5	3.8	1.8	1.0
1176	1.5	1.3	1.3	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.6	1.5	1.4	1.4	1.4	3.3	1.8	1.0
1207	1.5	1.3	1.3	1.4	1.3	1.4	1.4	1.2	1.4	1.4	1.5	1.4	1.3	1.4	1.4	3.4	1.8	1.0
1227	1.4	1.3	1.3	1.4	1.3	1.4	1.3	1.2	1.4	1.4	1.5	1.4	1.3	1.4	1.4	3.3	1.7	1.1
1268	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.2	1.3	1.3	1.5	1.3	1.3	1.4	1.4	3.3	1.6	1.1
1545	1.2	1.2	1.2	1.2	1.2	1.4	1.1	1.2	1.1	1.2	1.2	1.5	1.4	1.5	1.5	3.4	1.8	1.2
1561	1.2	1.2	1.2	1.2	1.2	1.4	1.1	1.2	1.1	1.2	1.2	1.5	1.4	1.5	1.5	3.5	1.9	1.2
1575	1.2	1.2	1.2	1.2	1.2	1.4	1.1	1.2	1.1	1.2	1.2	1.5	1.4	1.5	1.5	3.7	2.0	1.3
1609	1.2	1.2	1.2	1.2	1.2	1.3	1.1	1.2	1.1	1.2	1.2	1.5	1.5	1.5	1.5	3.8	2.1	1.3
1650	1.3	1.2	1.2	1.2	1.2	1.3	1.1	1.2	1.2	1.2	1.2	1.5	1.5	.5	1.5	4.0	2.2	1.4

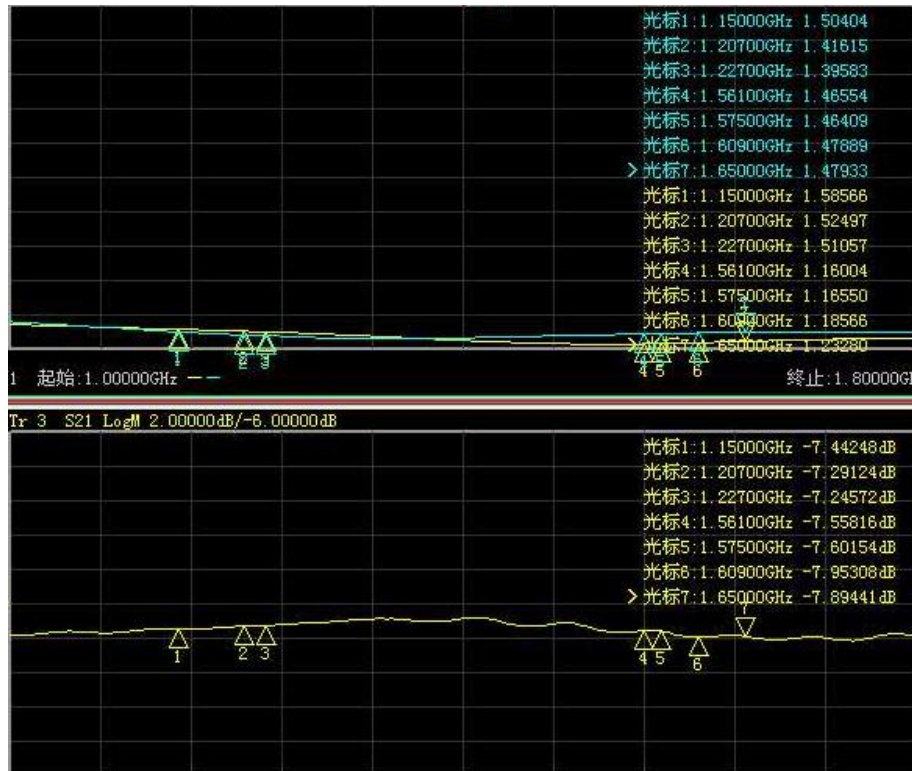
Performance Data



Gain :0dB



Gain :21dB



-7.5

Order Informations And Available Options

GS14 - A - DC - NM-NM - BO

Part Number:
Standard:
 0dB gain, N Female In&Out, Pass DC IN&J1

Gain Options:
Blank(Standard)- 0dB
 -Axx xx=01-20, Desired Gain Level
 -A Active, 21dB gain
 -P Passive,

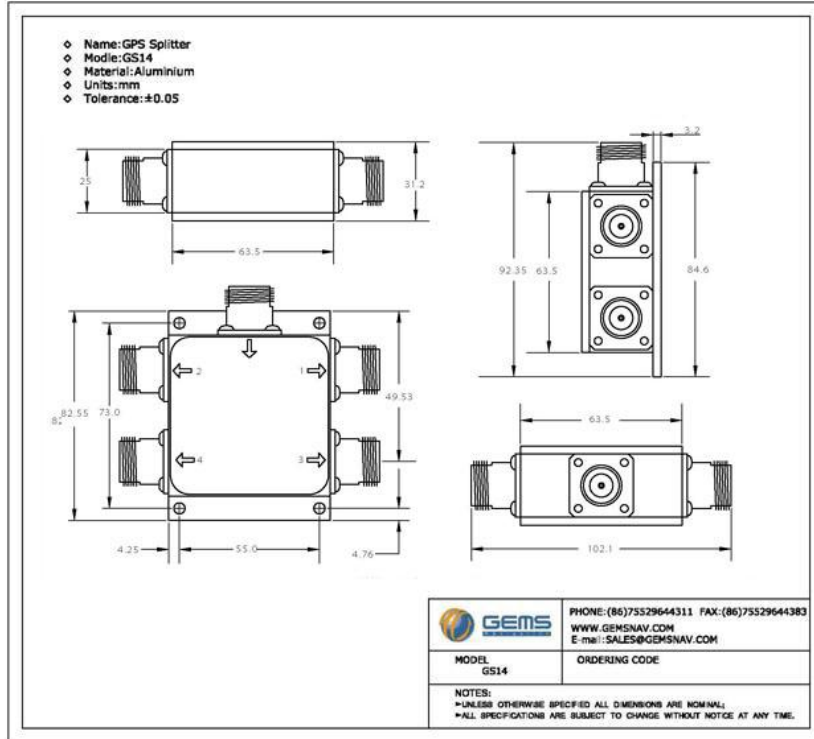
Power Options:
Blank(Standard) - Without Power adapter
 -DC With 230/5V Power adapter

Connector In
Blank(Standard) - N Female
 -NF N female -NM N Male
 -SF SMA Female -SM SMA Male
 -TF TNC Female -TM TNC Male
 -BF BNC Female -BM BNC Male

Connectors Output:
Blank(Standard) - N Female
 -NF N female -NM N Male
 -SF SMA Female -SM SMA Male
 -TF TNC Female -TM TNC Male
 -BF BNC Female -BM BNC Male

Pass DC or Block DC Options:
Blank(Standard) - Pass DC In & J1
 BI - Pass DC on J1 and Block DC In
 BO- Block DC Out and Pass DC In
 B- Block DC Out and In

Mechanical



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	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								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---->																			