

GLMGS121

GPS 2-Way Splitter



- Design For Wireless Infrastructure Applications
- Gain 0dB, 21dB And Passive Version Available
- Output port power at the same time intelligent selection of high voltage



power supply.

- 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
- High Isolations > 28dB

Description

The MGS12i is a GPS device with one end input and two end outputs, which usually divides the received signal from the active GPS receiving antenna into two outputs for GPS receiving equipment.

Both outputs of the MGS12i are powered on at the same time. The power divider internally selects the port for powering the active GPS antenna by comparing the voltages.

When the voltage values of the two output ports are different, the higher voltage port will be used to supply power to the active GPS antenna. The other port will have a 200 Ohm DC load to simulate any receiver antenna connected to this port DC loss.

When the two output ports have the same voltage value, the J1 port is used by default for power supply. The J2 port will have a 200 Ohm DC load.

Specifications

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Type	Max	Units
Freq. Range	Ant – Any Port, Unused Ports -50Ω(1)	1.1		1.7	GHz
Gain(2) -Amplified(Norm) -Amplified(Hi Iso)	Ant-Any Port, Unused Ports-50(1) (Gain may be specified by the customer)	20 9	21 10	24 11	dB
0dB	Ant- any Port, ,Unused Ports - 50Ω(1)	-1	0	1	
Input/output VSWR	All Ports 50Ω(1)		1.5:1	2.0:1	-
Noise Figure- Amplified	Ant-Any Port, Unused Ports-50Ω(1) Gain=20dB			2.0	dB
Amp. Balance	J1-J2 ,Ant-Any Port, Unused Ports- 50Ω(1)			0.5	dB
Phase. Balance	Phase(J1-J2),Ant-Any Port,Unused Port -50Ω(1)			1.0	deg
Delay -Passive -Amplified	Ant-Any Port, Unused Ports-50Ω(1), L1			3 5	ns
Isolation -Amp/Pass(Norm)	Adjacent Ports: Ant - 50Ω(1)	13			
-Amplified (Hi Iso.)	Alternate Ports: Ant – 50Ω(1)	21			dB
	Adjacent Ports: Ant - 50Ω(1)	35			
	Alternate Ports: Ant - 50Ω(1)	44			
DC IN	DC Input on any RF Output	4		12	VDC
DC Ripple	300 Hz to 1MHz			50	mV pk-pk
Device Current	Current Consumption of Active device, excluded Ant. Cur.		18	20	mA
Ant/Thru Current(3)	Max source DC current through device			250	mA
Antenna Monitor(4)	Ioc	Range for Open Circuit Threshold	15	75	mA
	Isc	Range for Short Circuit Threshold(5)	100	180	mA
Surge Protection	8/20us		4		KA

Data Performance

	VSWR(1575.42MHz)	Gain 0dB(1575.42MHz)
IN	1.16	
OUT1	1.10	0.04dB
OUT2	1.08	-0.22dB

Output port power supply (V)								
OUT1	5.00	6.00	5.00	6.00	4.00	5.00	5.00	0.00
OUT2	5.00	6.00	6.00	5.00	5.00	4.00	0.00	5.00
IN	4.81	5.78	5.85	5.75	4.91	4.75	4.71	4.70



Order Informations And Available Options

MGS12i - A NM

Part Number:
Power port selection:
Blank(Standard)- Output port voltage comparison
and selection

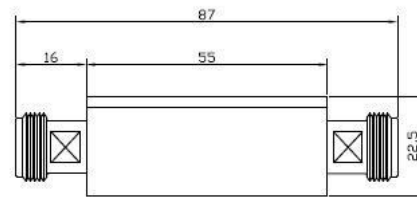
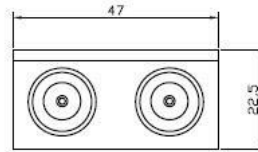
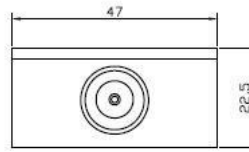
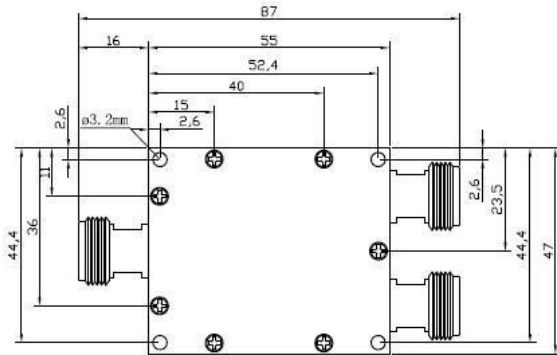
Gain Options:
Blank (Standard)-0dB
-Axx xx=01-21. Desired Gain Level
A-Active, 21dB gain

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

Please contact us for more configurations and application supports.

Mechanical

- ◇ Name:GPS/GNSS Splitter
- ◇ Modle:MGS12-NF
- ◇ Materlal:Aluminlum
- ◇ Unlts:mm
- ◇ Tolerance:±0.5



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MODEL
MGS12-NF

DRAWING DATE
2013.01.28

NOTES:

- ▶ UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL;
- ▶ ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.

Frequency reference table

Global/Compas Navigation Satellite Systems(GNSS/CNSS)	5					2					6/3			6			1															
Frequency (MHz)	1164	1176	1182	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											
Glonas(Rusia) G1,G2												G2+/-7																				
Galileo(Europian) L1,E1,E2,E5(E5a,E5b),E6	E5+/-15 E5a+/-12 E5b+/-12												E6+/-12				L6+/-5					E2	L1+/-17		E1							
Compas(Beidou 2,China)			B2+/-10										B3+/-10									B1+/-2										
Beidou 1 (ChinaTx)(LHCP/R)(RHCP)																															L	S
IRNSS (India)	L5+/-15																									L1+/-12					S+/-15	
OmniStar																		O+/-14----->														