MGS12i

GPS Splitter

RoHS

- **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**

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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

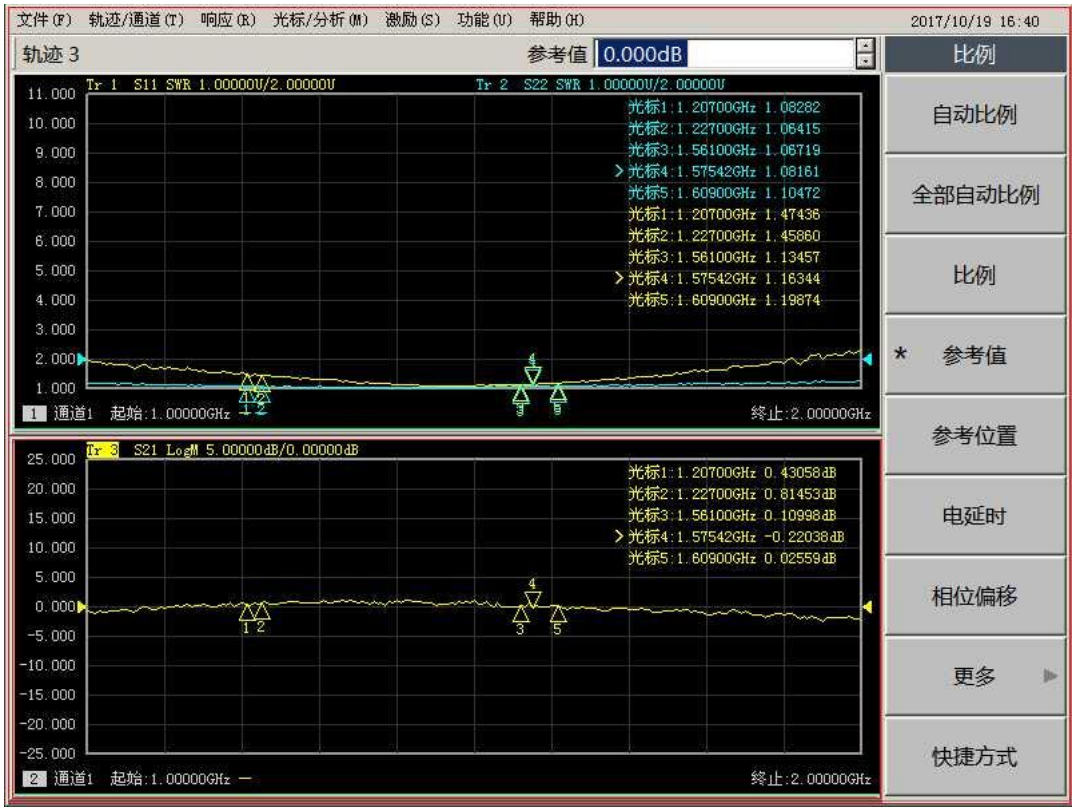
Electrical Specifications, Operating Temperature -40 to 85°c

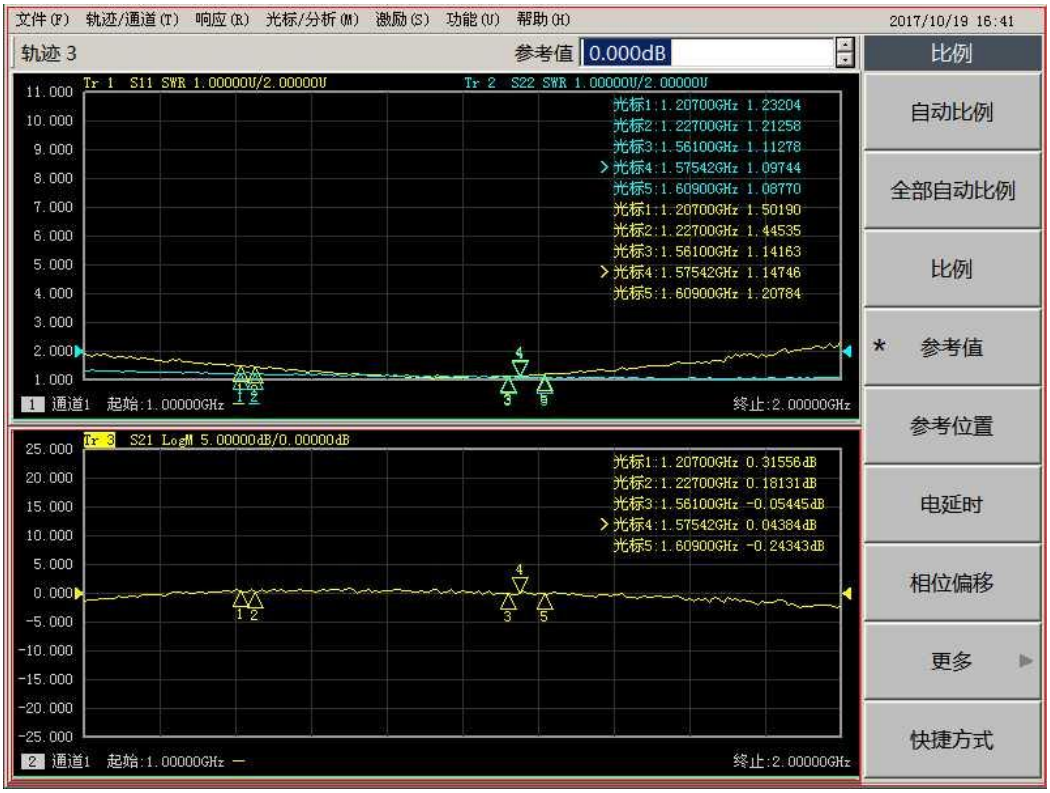
Parameter	Conditions	Min	Type	Max	Units
Freq. Range	Ant – Any Port, Unused Ports -50Ω	1164		1616	MHz
Gain	Ant-Any Port, Unused Ports-50 (Gain may be specified by the customer)	4	5	6	dB
Input/output VSWR	All Ports 50Ω		1.5:1	2.0:1	-
Noise Figure-Amplified	Ant-Any Port, Unused Ports-50Ω Gain=20dB			3.0	dB
Amp. Balance	IJ1-J2I,Ant-Any Port, Unused Ports-50Ω			3	dB
Isolation -Amp/Pass(Norm)	Adjacent Ports: Ant - 50Ω	0			dB
-Amplified (Hi Iso.)	Adjacent Ports: Ant - 50Ω	25			
DC IN	DC Input on any RF Output	3		9	VDC
Device Current	Current Consumption of Active device, excluded Ant. Cur.		18	20	mA
Current	Pass DC. No Powered configuration,DC input onJ1			250	mA

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

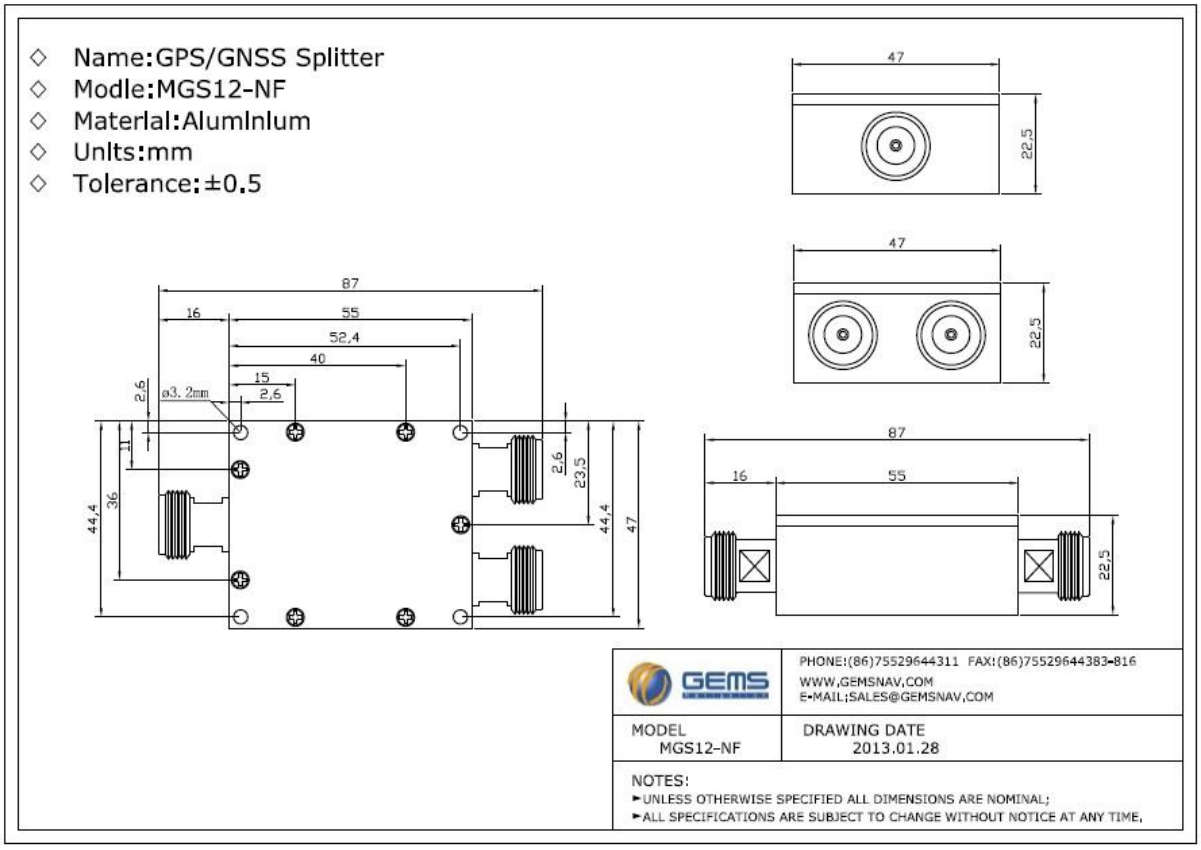
Part Number:
Power port selection:
Blank(Standard)- Output port voltage comparison and selection

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. Email: Sales@gemsnav.com.

Mechanical



Frequency reference table

Gllobal/Compass Navigatio Satellite Systems(GNSS/CN	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--->														