

GS12

GPS Splitter



GEMS
Navigation



- ✧ Design For Wireless Infrastructure Applications
- ✧ Gain 0dB, 15dB , 24dB And Passive Version Available
- ✧ 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 > 30dB



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Description

The GS12 GPS Splitter is a one-input, two -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 GS12 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 J2 would feature a 200 Ohm DC load to simulate an antenna DC current draw for any receiver connected to those ports.

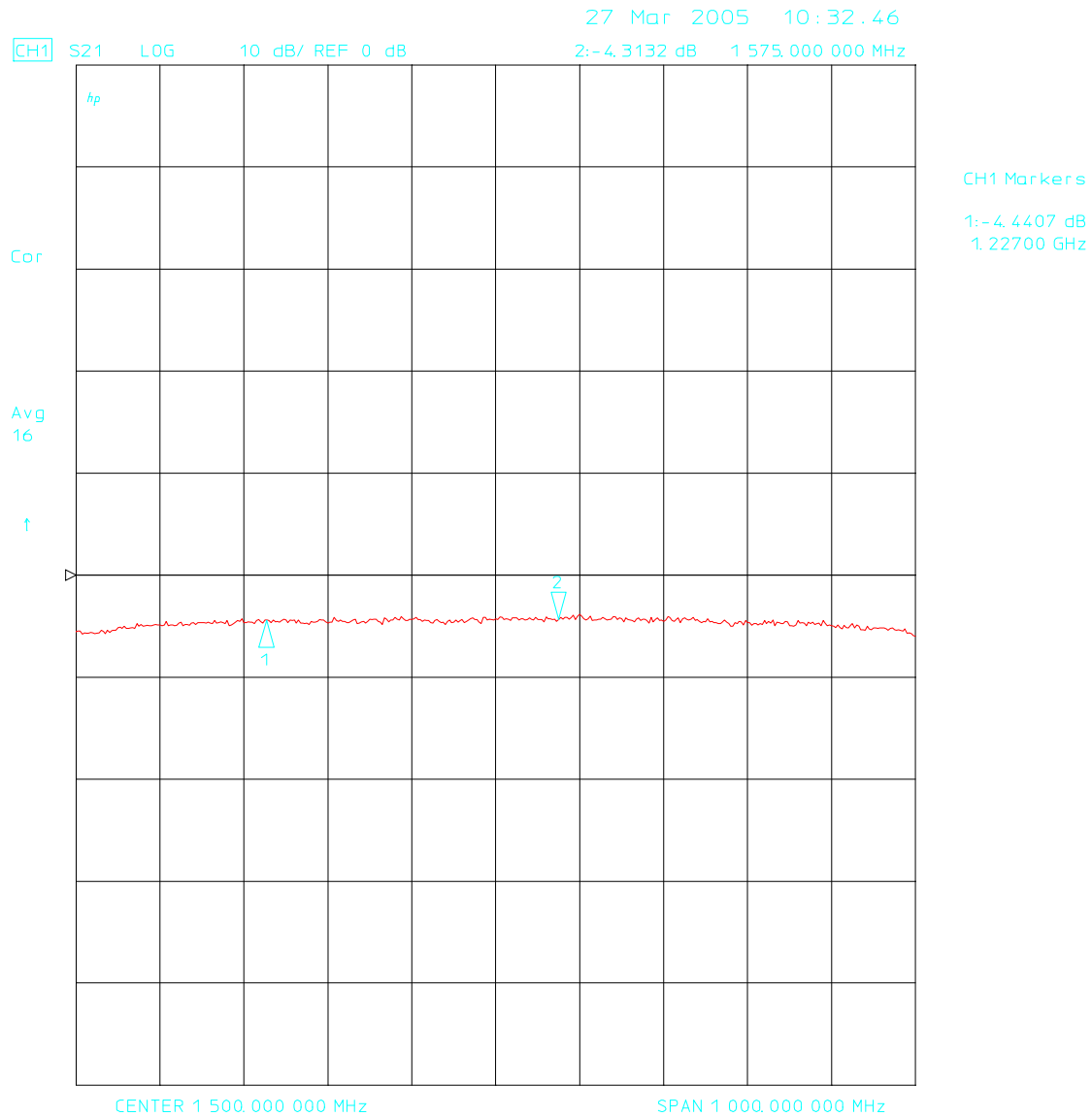
Specifications

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – Any Port	1.1		1.7	GHz
In &Out Imped.	In, all output ports		50		Ω
Gain -0dB -Amplified(Normal)	In- Output ports, ,Unused Ports - 50 Ω	-1	0	1	dB
		23	24	25	
Loss, Passive	In- Output ports, ,Unused Ports - 50 Ω	4	4.5	5.0	dB
Input SWR				2.0:1	-
Output SWR				2.0:1	-
Nois Figure- Amplified				3	dB
Gain Flatness - Amplified: - Passive:				2	dB
				1	dB
Amp. Balance				0.5	dB
Phase Balance				1.0	deg
Group Delay Flatness				1	ns
Isolation -Amplified/Passive -Gain:0dB-15dB	Adjacent Ports: In - 50 Ω	15			dB
	Opposite Ports: In – 50 Ω	21			
	Adjacent Ports: In - 50 Ω	30			
	Opposite Ports: In - 50 Ω	40			
AC IN	Wall Mount transformer		220		VAC
DC IN	DC Block, All ports with a 200 Ω Load			14	VDC
	PASS DC, Amplified	3		16	
	PASS DC, Passive			16	
	Powered, to be specified				
Device Current				16	mA
Current	Pass DC, No Powered configuration, DC input on J1			250	mA
	Powered, to be specified				mA
Max RF Input -Amplified -Passive	Max RF input without damage			0	dBm
				30	

Performance Data

Loss(Passive)



Input VSWR(Passive)

27 Mar 2005 10:46.02

CH1 S11 SWR 1 / REF 1 3: 1.8585 1 422 300 000 MHz

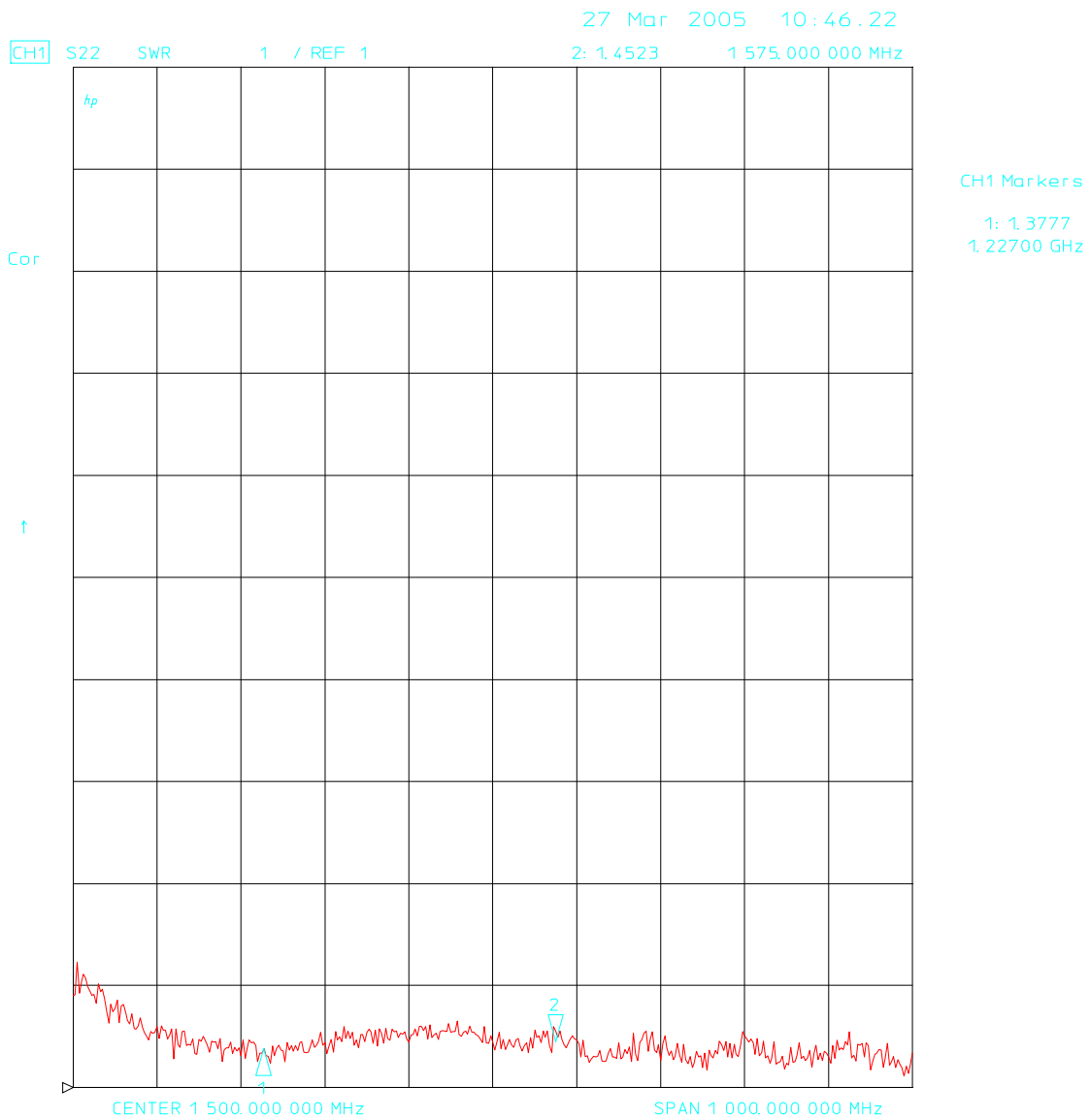


CH1 Markers

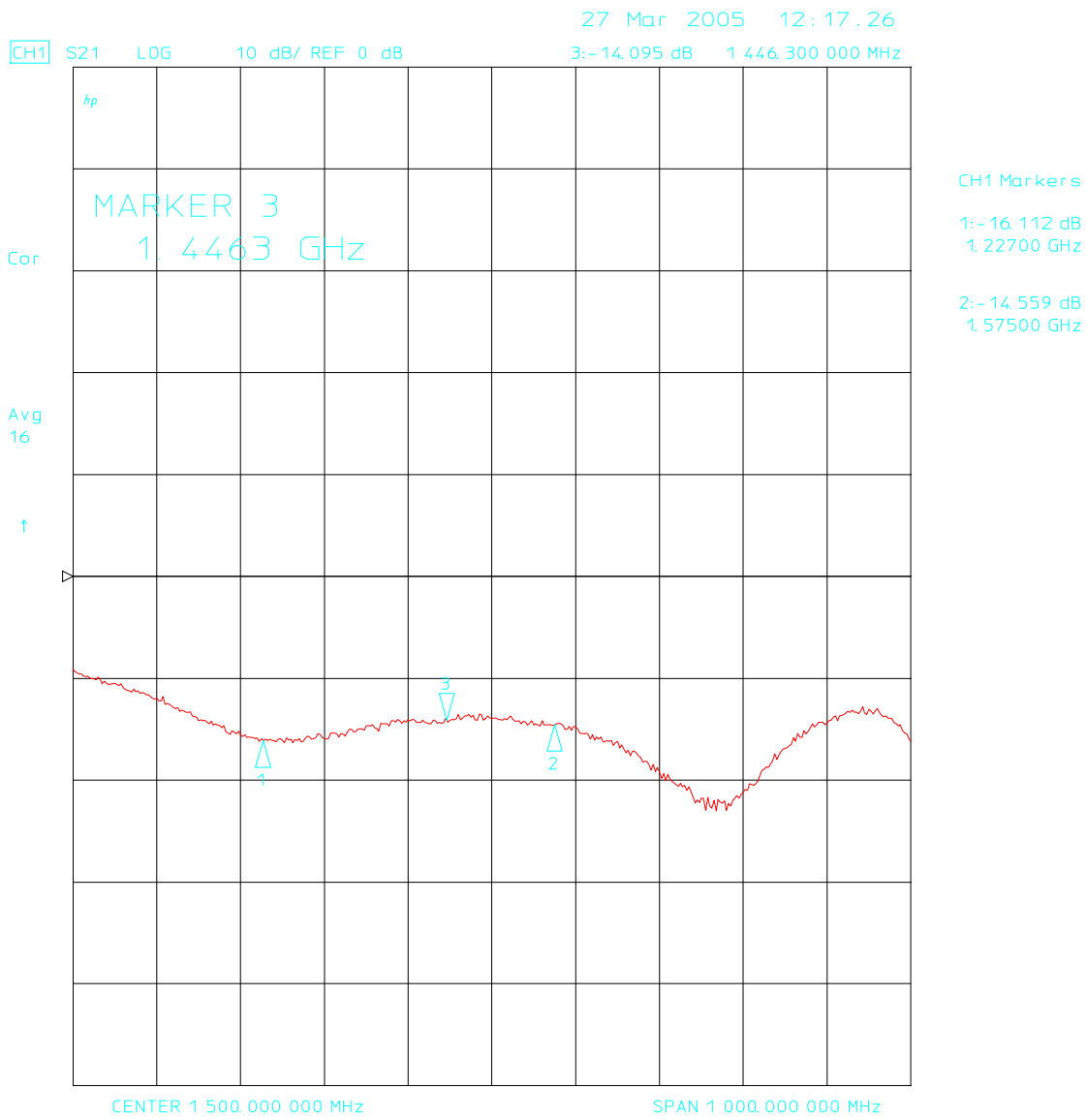
1: 1.2641
1.22700 GHz

2: 1.3184
1.57500 GHz

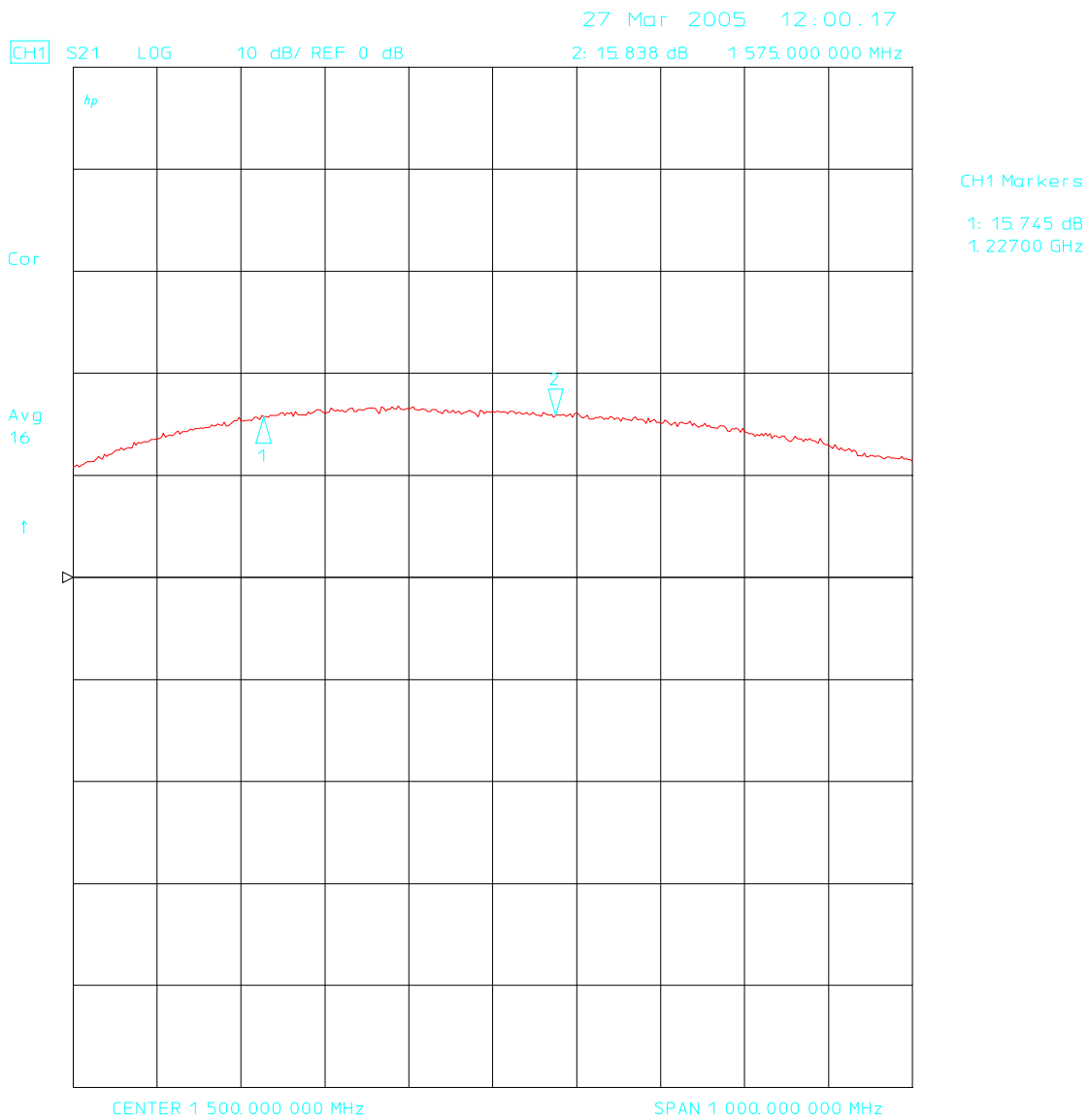
Output VSWR(Passive)



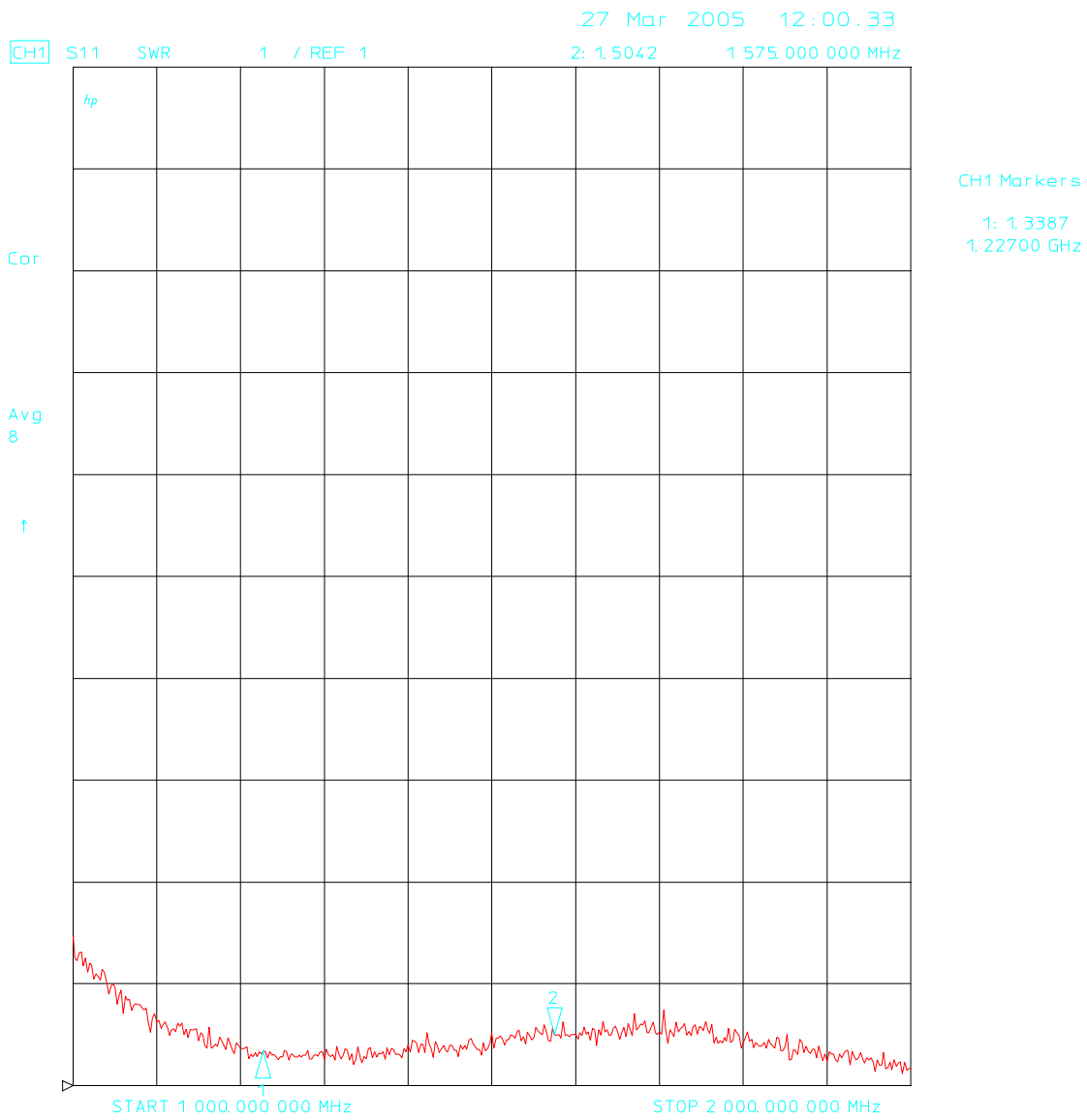
Isolation (Passive)



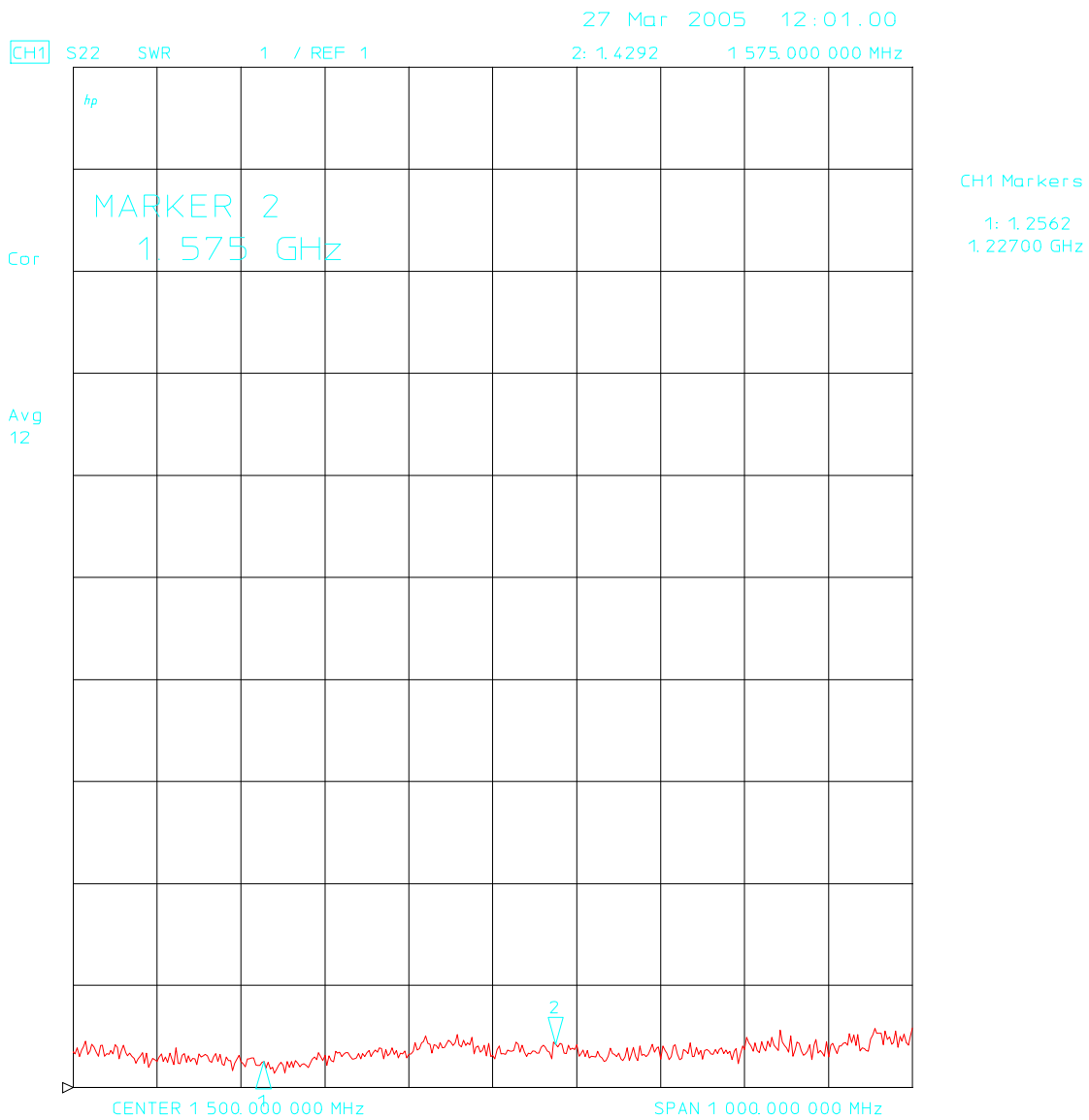
Gain(High Isolation, 15dB)



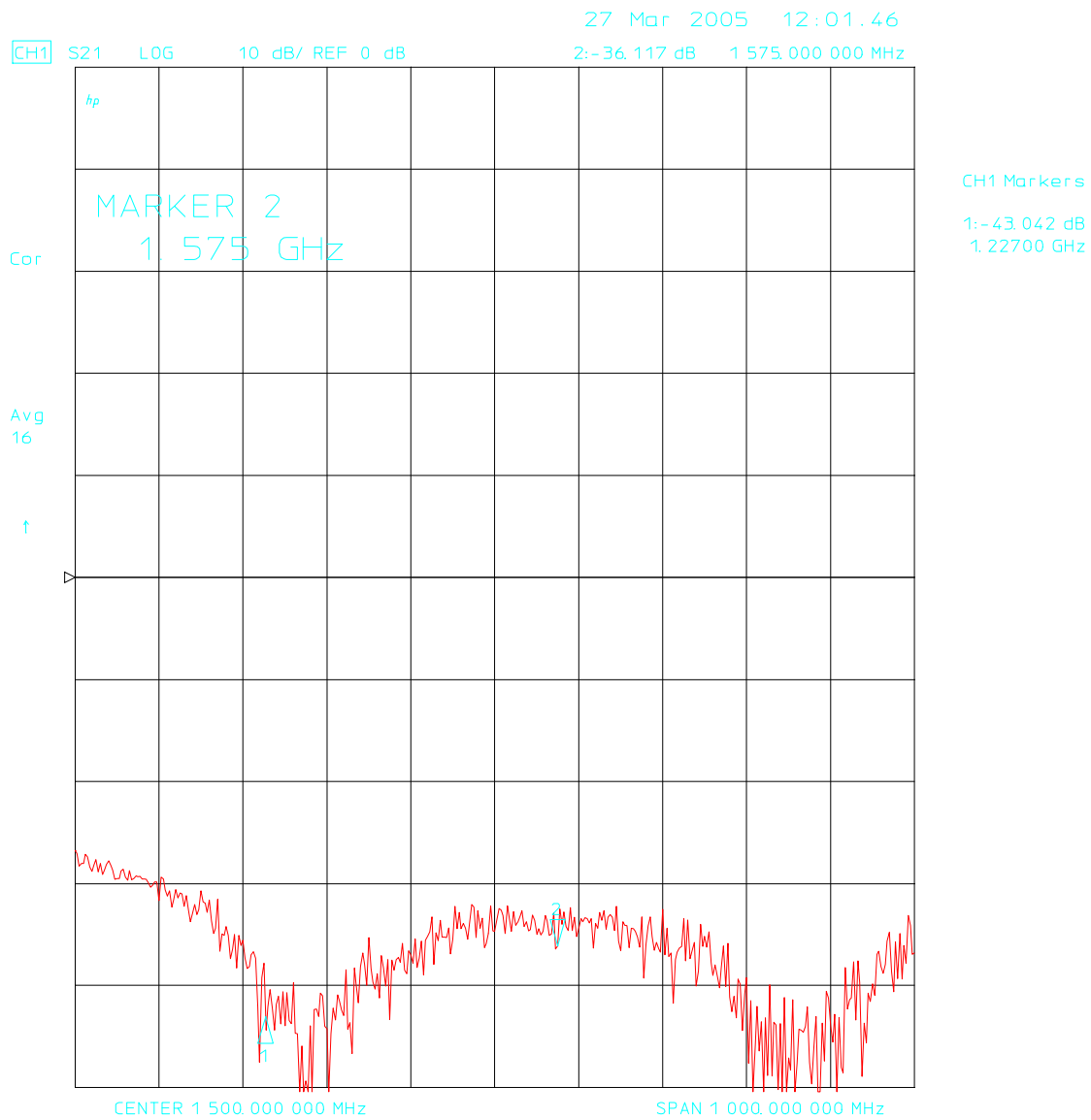
Input VSWR(High Isolation, 15dB)



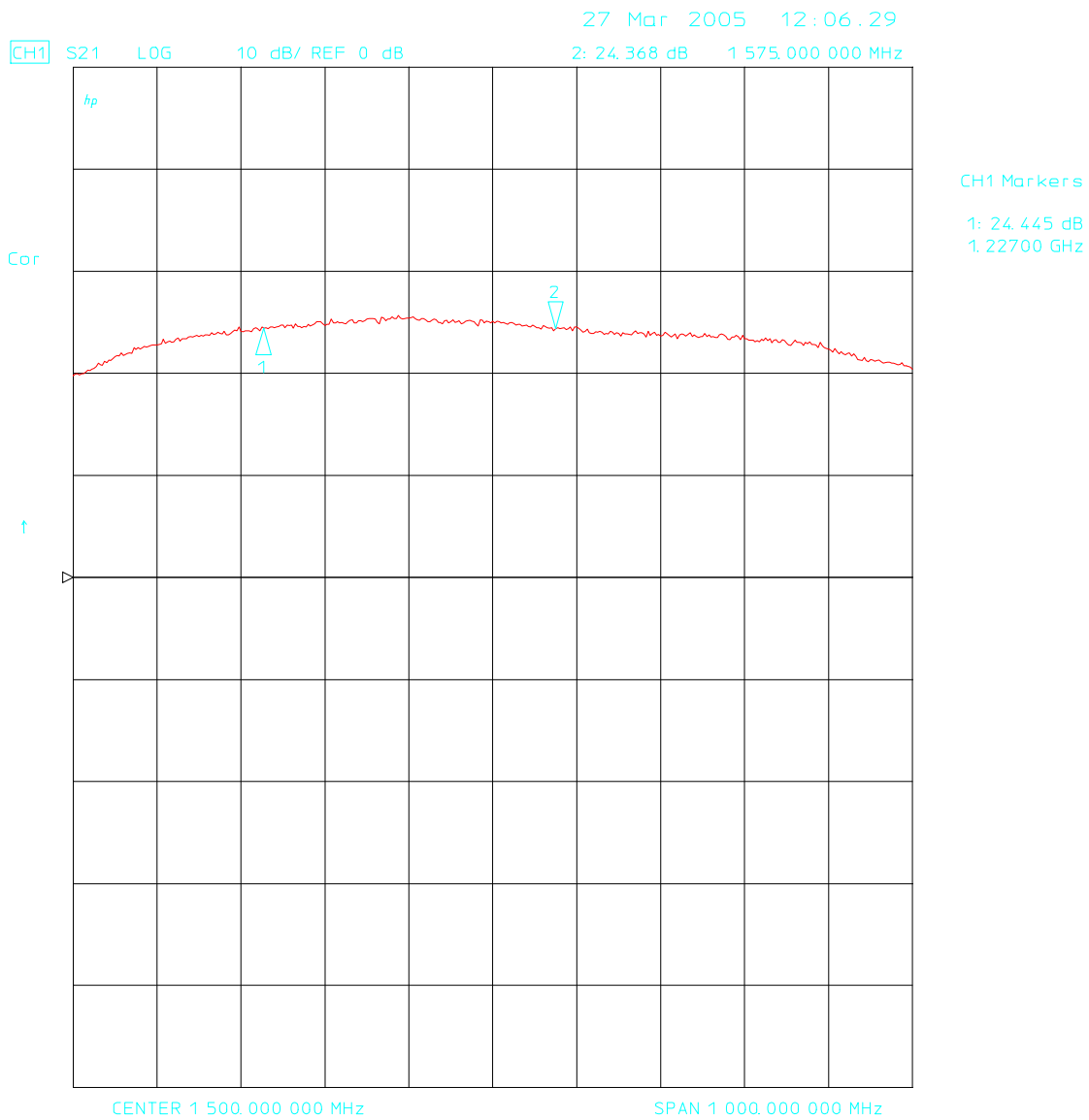
Output VSWR(High Isolation, 15dB)



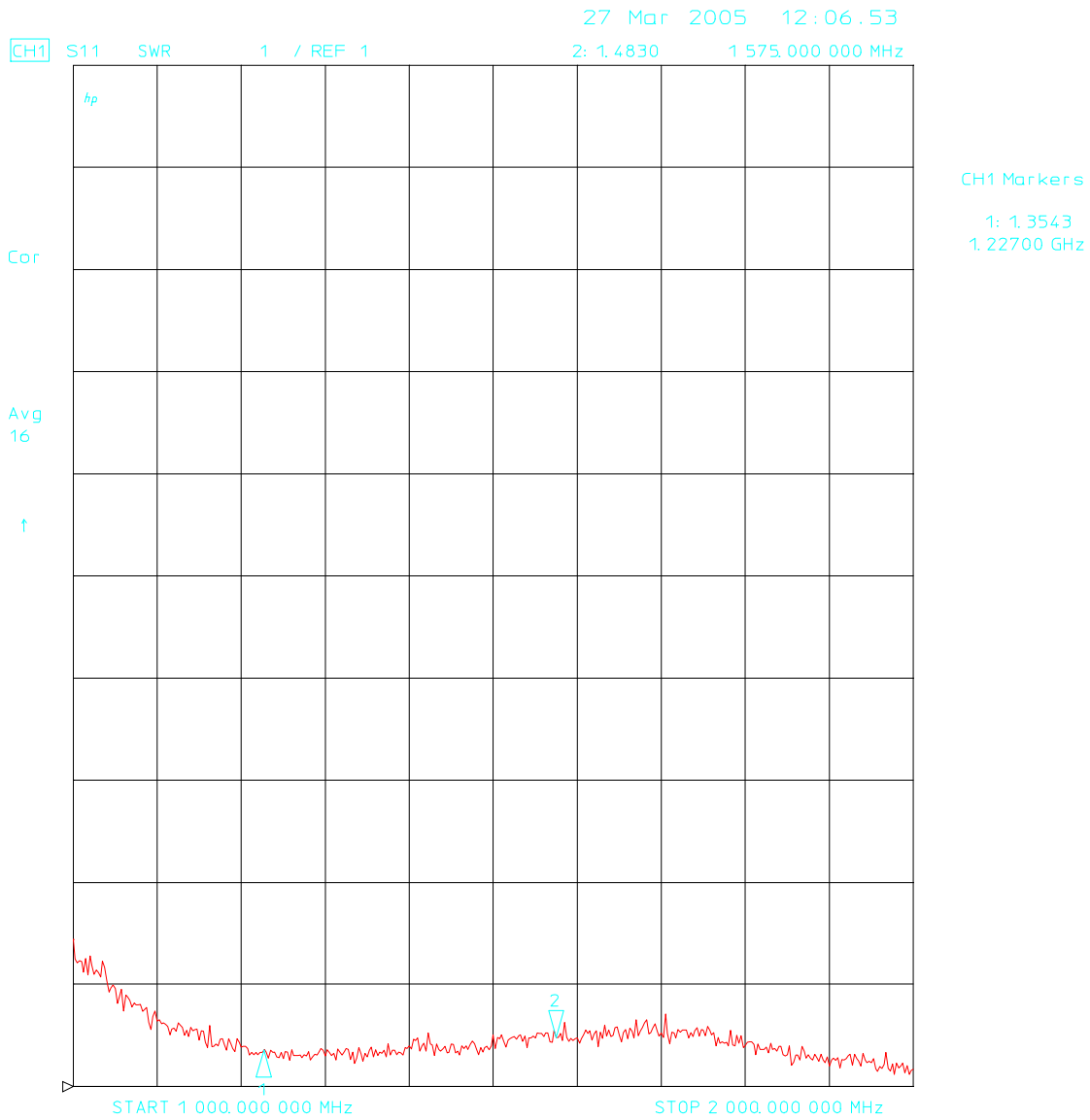
Isolation(High Isolation, 15dB)



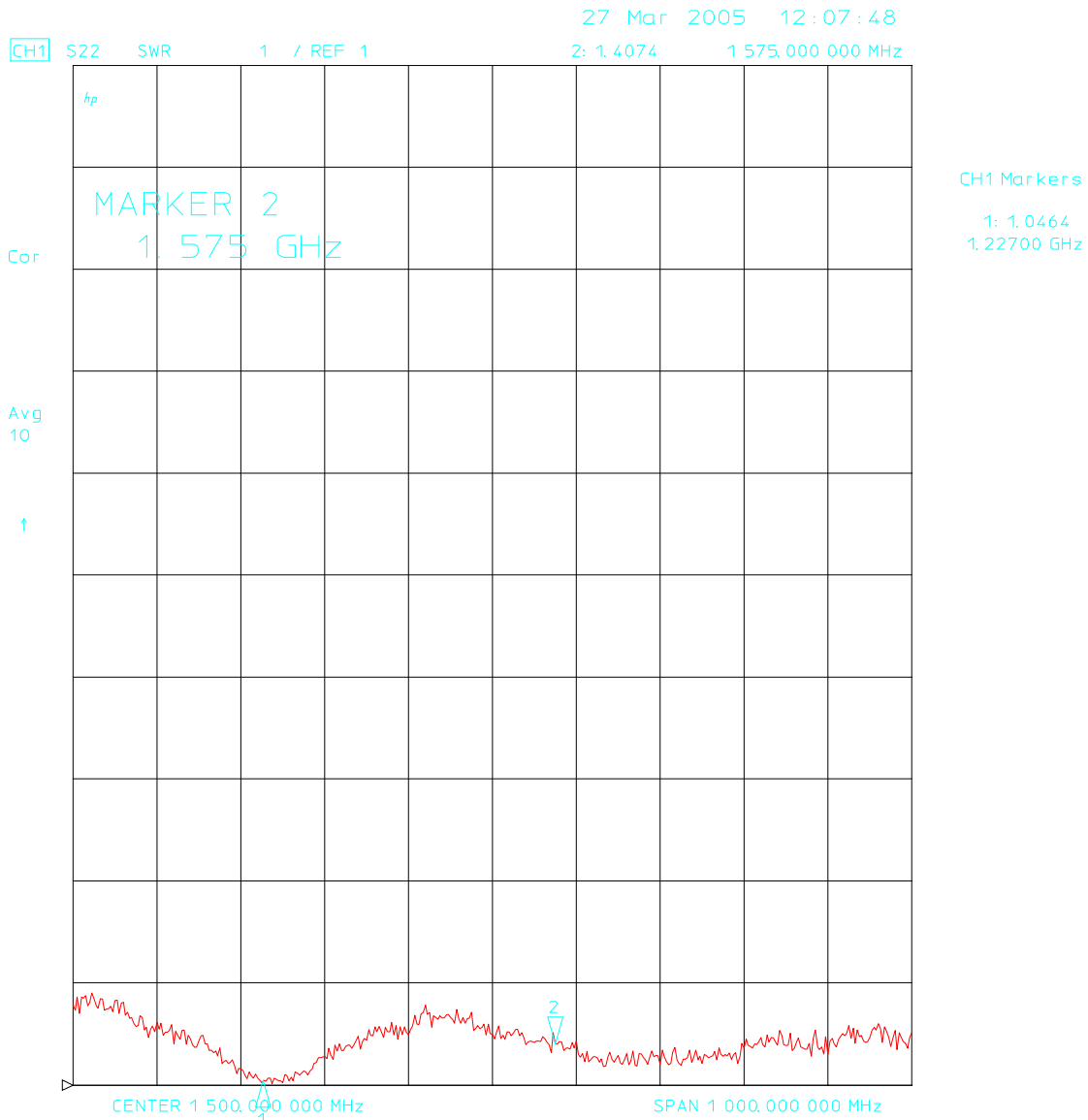
Gain(Normal 24 db)



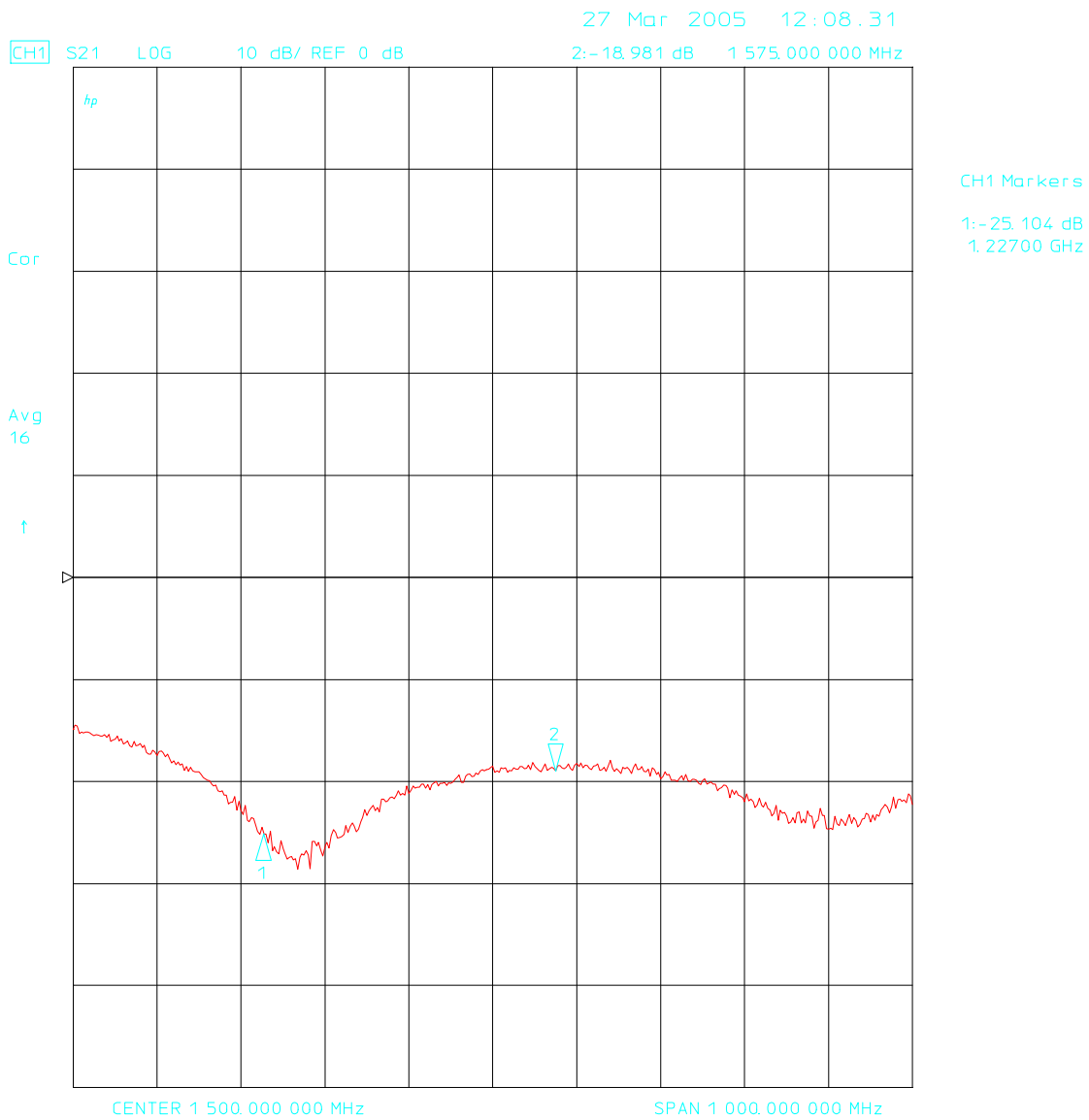
Input VSWR (Normal 24 db)



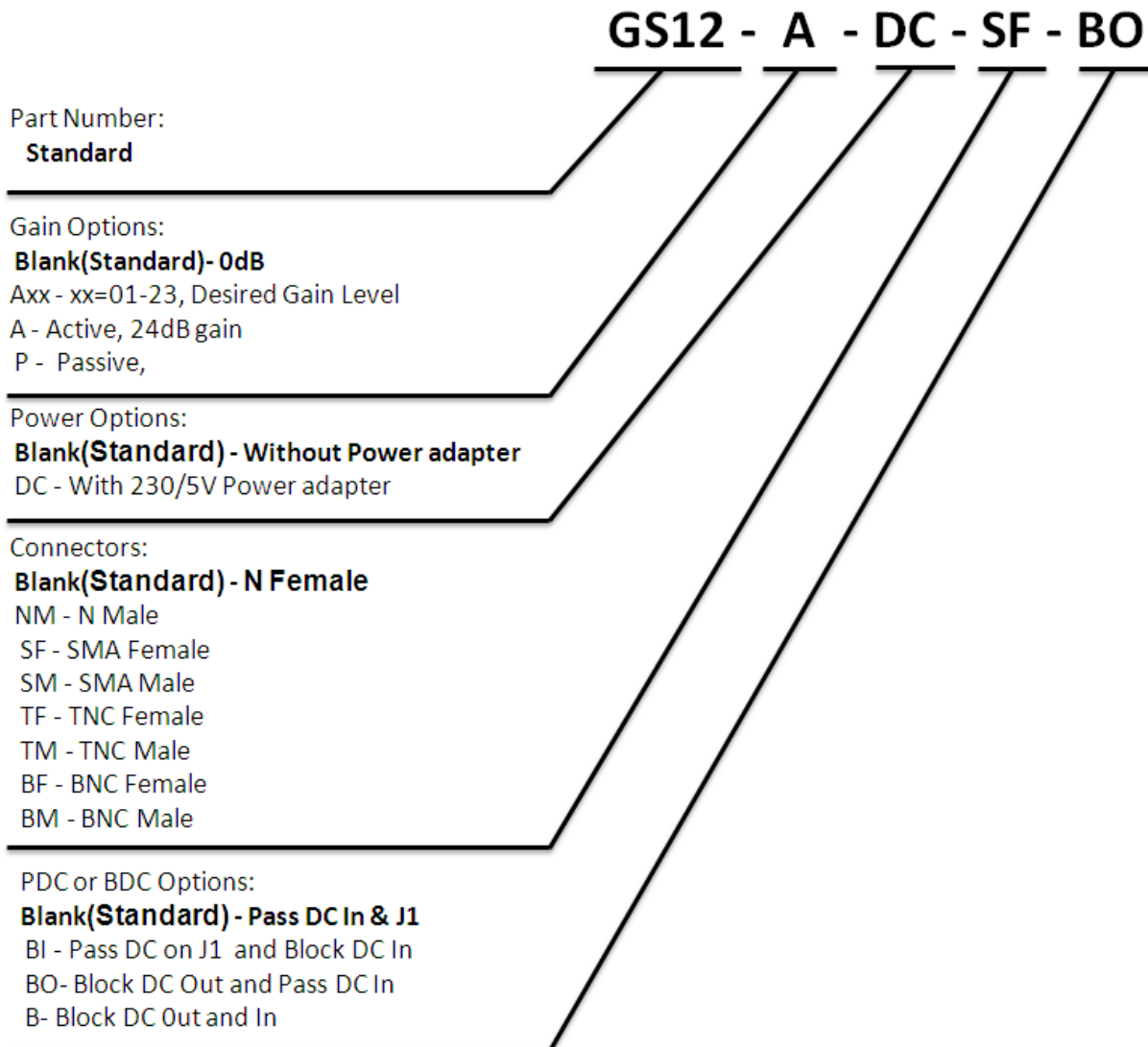
Output VSWR (Normal 24 db)



Isolation (Normal 24 db)

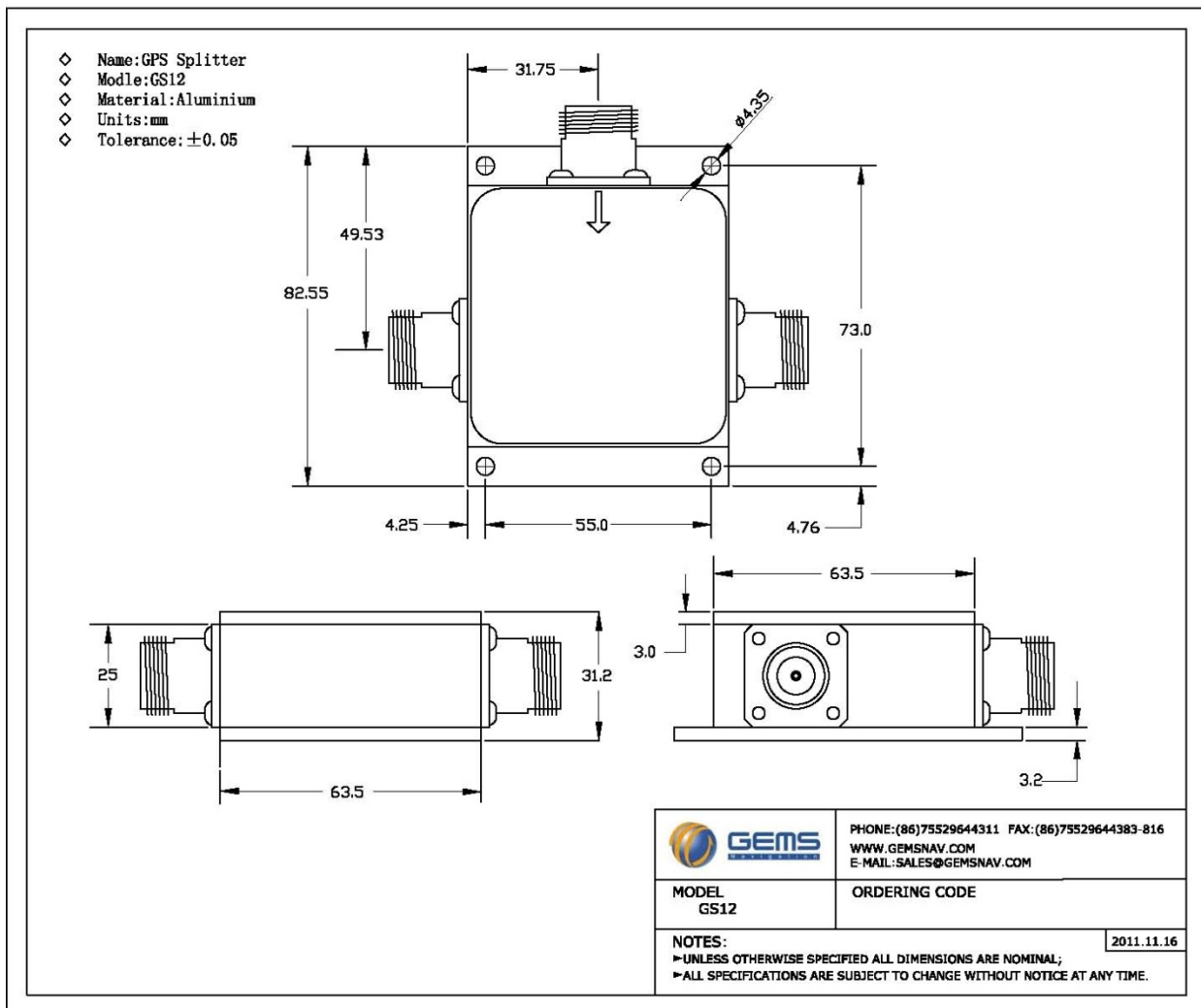


Order Informations And Available Options



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

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	1216	1227	1230	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 (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																O+/-14-->																			