

A11M Amplifier

Features

- ❖ Excellent Noise Figure
 - $F < 1.8\text{dB}$
- ❖ Excellent Gain
 - $G = 30\text{dB}$
- ❖ Passes L1, L2, L5 GPS, GLONASS, Galileo & Compass
- ❖ 0dB to 30dB Variable Gain Option Available
- ❖ RoHS & WEEE Compliant



Description

Designed with the thin link margins of satellite navigation systems in mind, the A11M Amplifier is a single stage gain block that covers the GPS, Galileo, and GLONASS frequencies. The device features 30dB of gain and a noise figure of less than 1.8dB. Since the product consumes less than 16mA, it is easily powered by any GPS receiver's antenna voltage output.

The A11M is an inline device designed to strengthen the signal and reach of the entire L-band. The A11M amplifier comes with many available options to meet your specific needs. Please call, fax, email (sales@gpssource.com), or visit our website (www.gpssource.com) for further information on product options & specifications.

A11M Amplifier

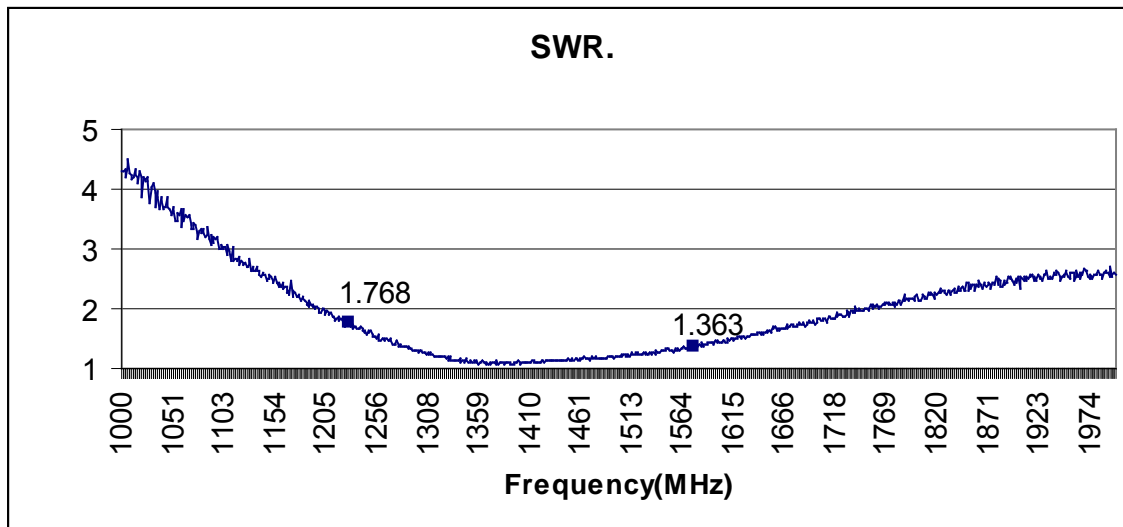
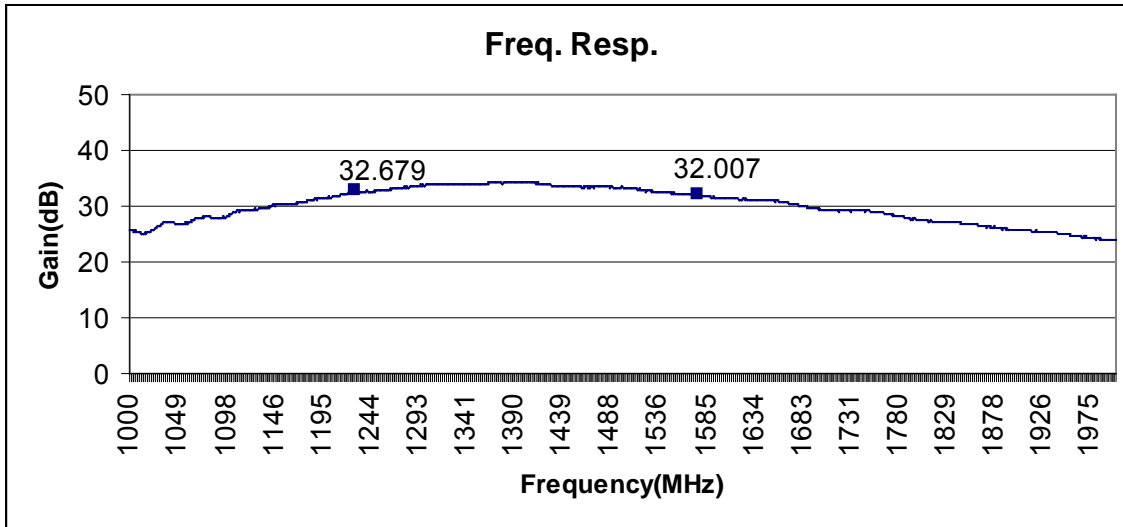
Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	IN – OUT, IN/OUT-50Ω	1		2	GHz
In/Out Imped.	IN, OUT		50		Ω
Gain	IN – OUT, IN/OUT-50Ω				
1227MHz		30	32	33	dB
1575MHz		28	30	32	
Variable Gain Opt.	IN – OUT, IN/OUT-50Ω				
1227MHz:					dB
Max Gain		28	30	32	
Min Gain:		-4	-3	-1	
1575MHz					
Max Gain		28	30	32	
Min Gain:		-2	0	1	
Input SWR	OUT Port - 50Ω			2.0:1	-
Output SWR	IN Port - 50Ω			2.0:1	-
Noise Figure	IN – OUT, IN/OUT-50Ω			1.8	dB
Gain Flatness	L1 – L2 , IN – OUT, IN/OUT-50Ω			4	dB
Group Delay Flatness	$\tau_{d,max} - \tau_{d,min}$, IN – OUT			1	ns
Reverse Isolation	OUT – IN	30			dB
Device Current	Current Consumption of device, excludes Ant. Cur.			16	mA
Ant/Thru Current	Pass DC	Non-Powered Configuration, DC Input on OUT port		250	mA
Max RF Input	Max RF input without damage			10	dBm

A11M Amplifier

Performance Data

A11 Amplifier



A11M Amplifier

Available Options:

RF Connector Options:		
Connector Options	Connector Type	Limitations
	N (Male & Female)	
	SMA (Male & Female)	
	TNC (Male & Female)	
Housings	Housing Type	Limitations
	Mini,	Powered Option Not Ava.
Port Options:		
Standard Configuration	Pass DC Input and Output	
<i>Special</i> Configuration	Block DC Input or Block DC Output (cannot block both)	

A11M Amplifier

Part Number

A11M – A – X-X-X-X – SF

Product:
Standard

Custom Gain Option:
Blank – Default Gain, 30dB
AXX – XX = Desired Gain Level

Environmental Option(s):
B - Beacon
E - EMI Shielding (includes waterproofing)
HS - Hermetically Sealed
V - Variable Gain
W - Waterproof

Connector Options:
NF – N, Female
NM – N, Male
SF – SMA, Female
SM – SMA, Male
TF – TNC, Female
TM – TNC, Male

For help in creating the part number to meet your exact needs, contact us at Sales@gpssource.com or visit our website at www.gpssource.com.