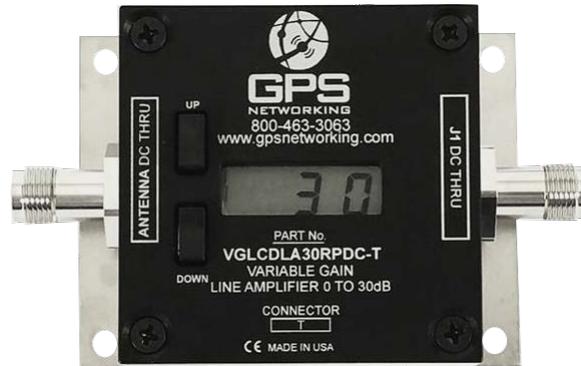


# *VGLCDLA30RPDC*

## *Variable Gain Line Amplifier with LCD Display - Technical Product Data*



### Features

- Variable Gain Amplifier -  $0 < \text{Gain} < 30\text{dB}$  in 1dB increments
- Passes GPS L1, L2, L5, GLONASS and Galileo frequency bands (entire L-band)
- Excellent Gain Flatness
- Excellent SWR throughout Dynamic Range
- Very Low Noise Figure
- Excellent 1dB compression point, 3<sup>rd</sup> order intercept

### Description

The VGLCDLA30RPDC is a GPS Variable Gain Line Amplifier featuring a variable gain range from 0 to 30dB with an LCD display and push button controls in 1dB increments. The variable gain option makes this unit highly versatile and enables you to control the settings within your environment. The frequency response covers GPS L1, L2, L5, Galileo, GLONASS and all other L-band frequencies with excellent flatness. In the default configuration, the RF output (J1) passes DC from the connected GPS receiver through the amplifier to the active antenna, allowing the GPS receiver to power both the antenna and the LA30RPDC amplifier. In the Networked (Externally Powered) configuration, the output is DC Blocked and the user selects the input voltage that will be sent up the coax to power an external antenna. The LA30RPDC has a very low noise figure and an excellent 1dB compression point.

## Electrical Specifications, T<sub>A</sub> = 25°C

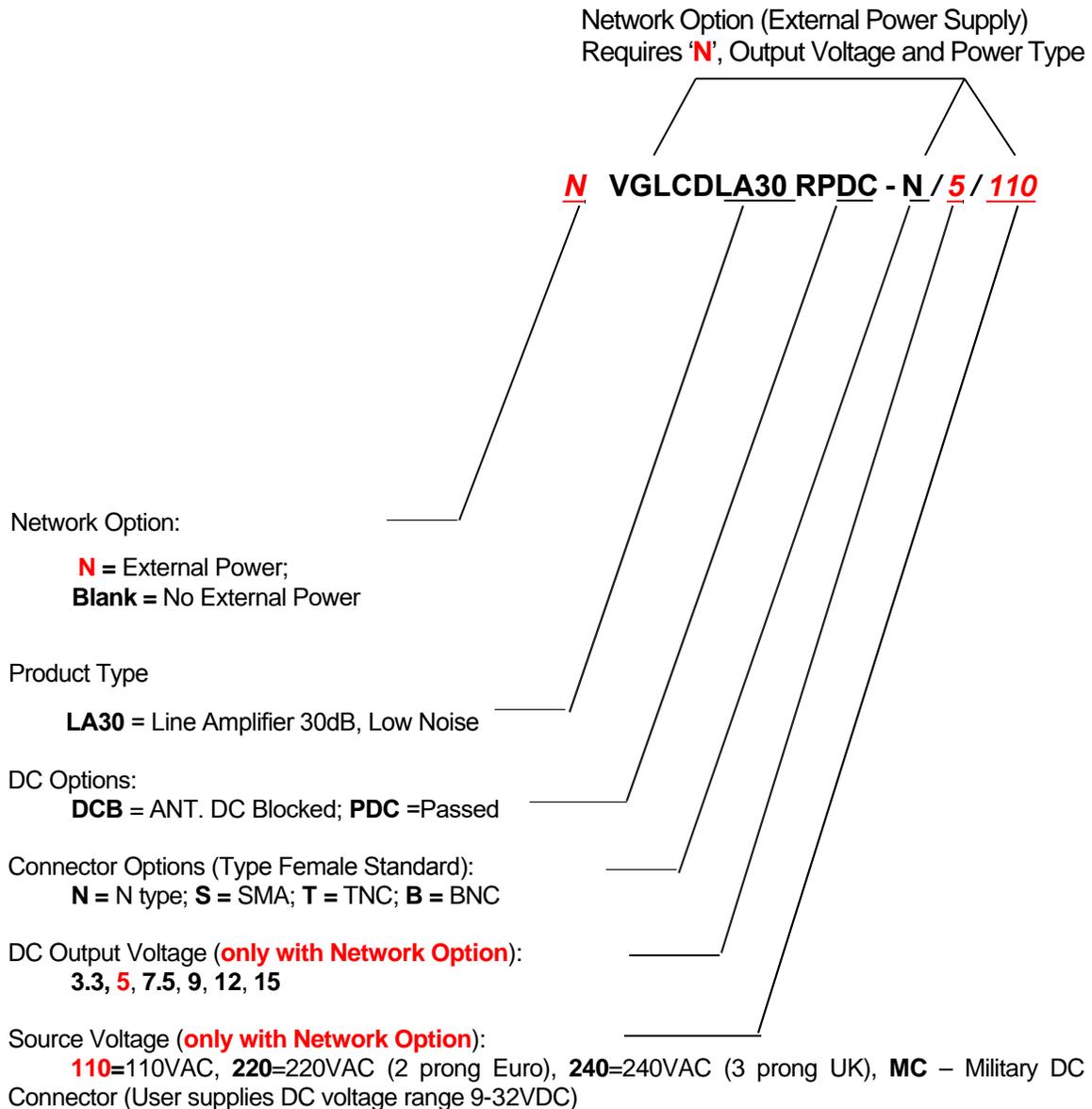
Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Antenna - J1	1.1		1.7	GHz
In/Out Impedance	Ant, J1		50		Ω
Gain <sup>(1)</sup> @ *	Ant – J1	0		30	dB
Input VSWR	J1 - 50 Ω			1.8:1	
Noise Figure	Ant – J1		1.7		dB
Gain Flatness	L5 – L1 , Ant – J1		Δ	FE	dB
Reverse Isolation	J1 – Ant	50			dB
1dB Compression	Ant – J1		-3Δ		dBm
	Δ				
DC Input Voltage	DC Input on J1	HEH		15	Vdc
DC Current	Amplifier current draw at 5vdc typical		I €		mA

## Available Options

Network Power Supply			
Source Voltage Options	VOLTAGE INPUT		STYLE
		110VAC	Transformer (Wall Mount)
		220VAC (2 prong Euro)	Transformer (Wall Mount)
		240VAC (3 prong UK)	Transformer (Wall Mount)
		DC input 9 – 32 VDC	Military Style Connector
Output Voltage Options <sup>(1)</sup>	3.3 to 15 VDC	500mA Max. Current	
Pass/Block DC Options			
Pass DC <sup>(1)</sup>	All Ports Pass DC		
DC Blocked <sup>(1)</sup>	Ant is DC blocked, Pass DC J1/ Output		
RF Connector Options	CONNECTOR STYLE		COMMENTS
		Type N-female	No Charge
		Type SMA-female	No Charge
		Type TNC-female	No Charge
		Type BNC-female	No Charge

(1) With Network Option, any RF port (input or output can be DC blocked or can pass the network DC voltage.

## Part Number Configuration

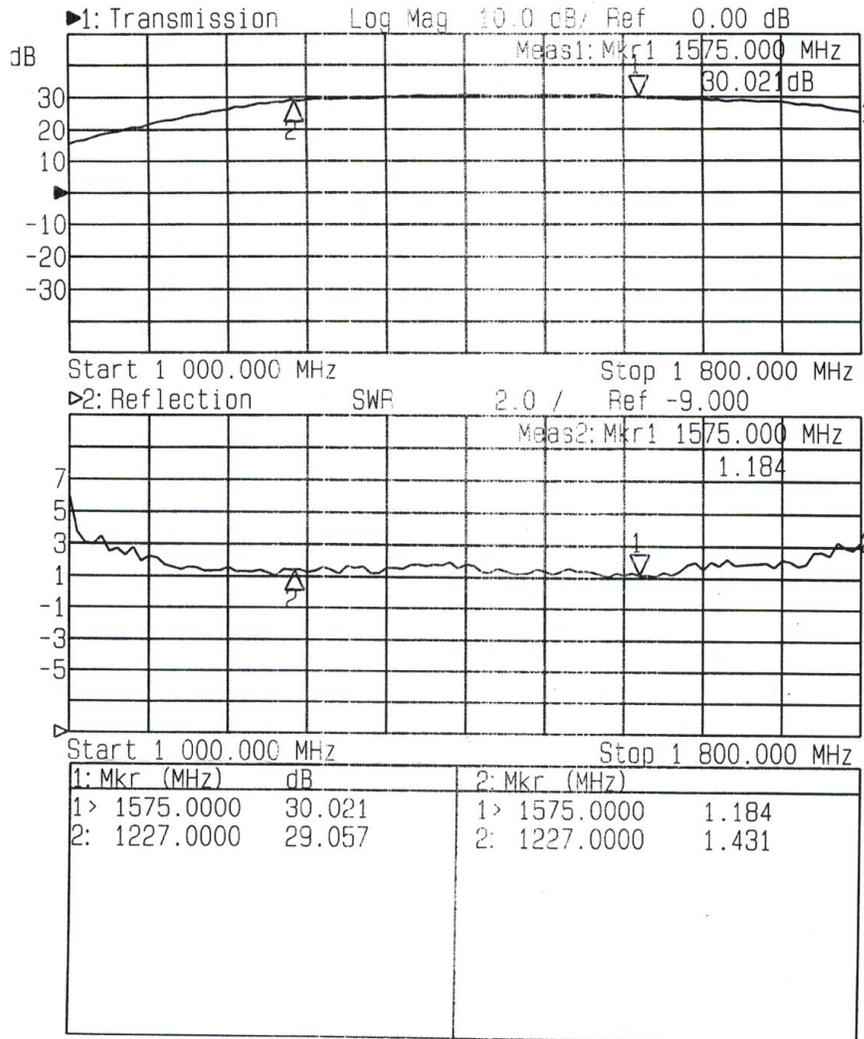


(Contact GPS Networking Technical Support at 719-595-9880 or [salestech@gpsnetworking.com](mailto:salestech@gpsnetworking.com) for any questions regarding non-standard configurations and corresponding part numbers)

Performance

**LA30RPDC** (Standard Gain)

Input SWR (Ant. port) and Frequency Response: Ant. To J1 (Typical, Type N connectors)



# Mechanical

**Dimensions:** Height: 1.3"  
 Length (not including connectors) Body: 2.5"  
 Base Plate: 3.25"  
 Width (not including connectors): 2.5"  
**Weight:** 11 oz. (316 grams)

**Operating Temp. Range:** 0° to + 50°C

Finish Housing and Base Plate: ELECTROLESS NICKEL PLATED  
 MIL-C-26074C CLASS 1, .0001-.0003 MAX  
 Finish Lid: ANODIZE, TYPE II, CLASS 2, BLACK, per MIL-A-8625

