

LA25RDCB

Line Amplifier 25dB Gain Technical Product Data

Features

- **Amplifier Gain of 25dB**
Gain ≥ 24.5 dB
- **Passes GPS L1, L2, L5, GLONASS and Galileo frequency bands (entire L-band)**
- **Extremely Flat Group Delay**
Less than 1ns Variation
- **Excellent Gain Flatness**
Gain [L1 – L2] < 1.0 dB

Description

The LA25RDCB GPS Line Amplifier is a one input, one output device with a 25dB gain block. The frequency response covers both GPS L1 & L2 and GLONASS. This device has the RF output (J1) blocking DC from the connected GPS receiver and also will block DC on the RF input (J2) to the antenna, allowing the DC from the Military Connector to only power the amplifier.

Electrical Specifications, T_A = 25⁰C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – J1	1.1		1.7	GHz
In/Out Imped.	Ant, J1		50		Ω
Gain	Ant – J1	24	25	26	dB
Input SWR	J1 - 50 Ω			1.8:1	-
Output SWR	Ant - 50 Ω			1.8:1	-
Noise Figure	Ant – J1		3.3	3.5	dB
Gain Flatness	[L1 – L2], Ant – J1		0.5	1.0	dB
Reverse Isolation	J1 – Ant	35			dB
Req. DC Input V.	Non-Network Configuration, DC Input on J1	3.6		15	Vdc
Current ⁽¹⁾	Amplifier Current Draw, All products - 50 Ω			15	mA

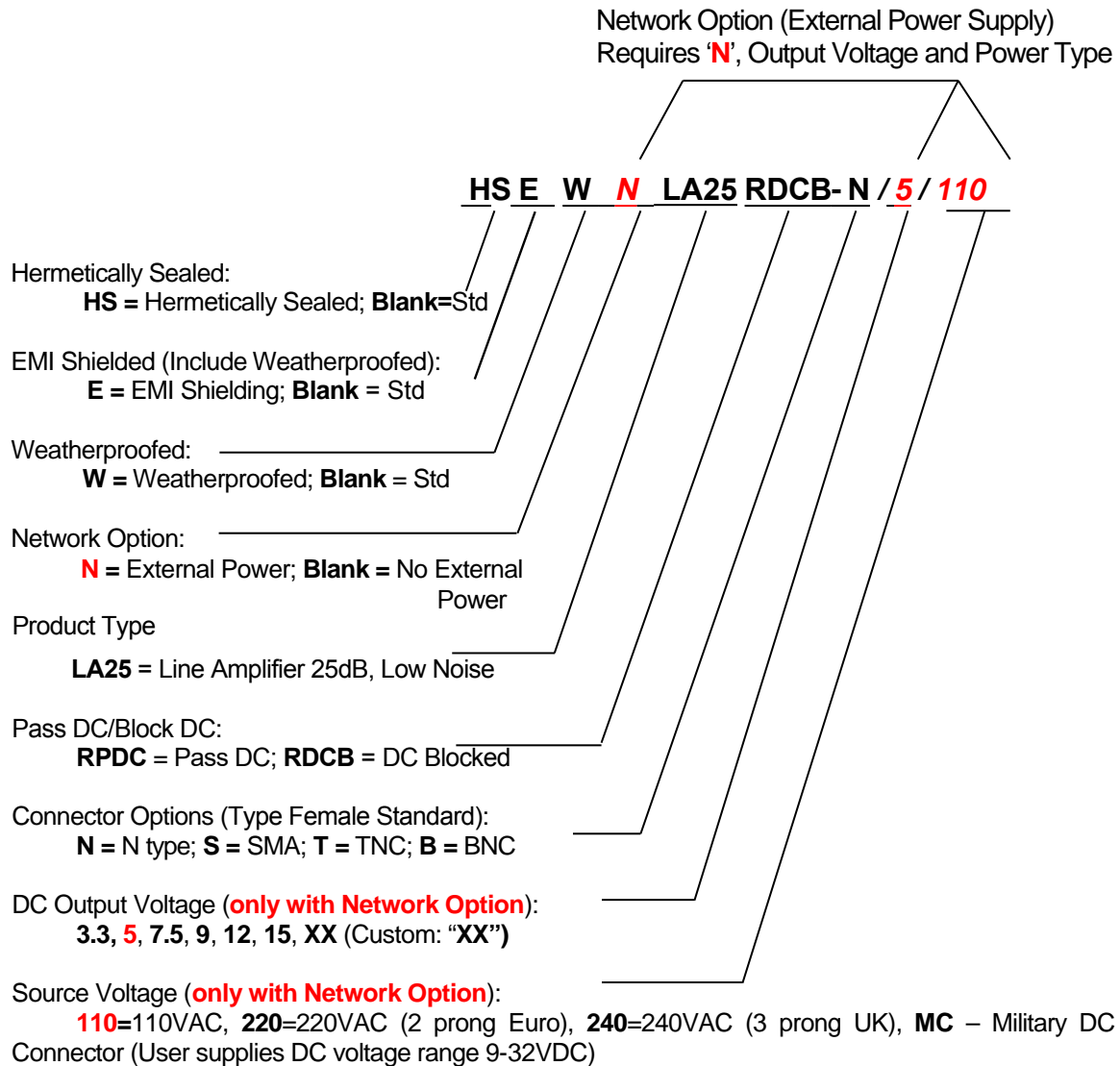
(1) Current draw on J1 port in the non-networked configuration.

Available Options

Network Power Supply		
Source Voltage Options	VOLTAGE INPUT	STYLE
	110VAC	Transformer (Wall Mount)
	220 VAC	Transformer (Wall Mount)
	240 VAC (United Kingdom)	Transformer (Wall Mount)
	Customer Supplied DC 9-32 VDC	Military Style Connector
Output Voltage Options ⁽¹⁾	DC VOLTAGE OUT	MAX CURRENT OUT FOR CORRESPONDING Vout
	5 V	110mA
	7.5V	130mA
	9V	140mA
	12V	170mA
	15V	210mA
	Custom	TDB
Pass/Block DC Options		
Pass DC ⁽¹⁾	All Ports Pass DC	
DC Blocked ⁽¹⁾	Ant is DC blocked, Pass DC J1	
RF Connector Options		
Connector Options	CONNECTOR STYLE	CHARGE
	Type N	NC
	Type SMA	NC
	Type TNC	NC
	Type BNC	NC

(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 for any questions regarding non-standard configurations and corresponding part numbers)

Performance

Input SWR (Ant. Port) and Frequency Response: Ant. To J1 (Typical, type N connector):

