



+1-703-256-8900 or 800-628-0885 info@NavtechGPS.com www.NavtechGPS.com

# DRMALDCBS2X32

Dual Antenna Rack Mount Amplified 2X32 GPS Splitter Technical Product Data





## **Features**

- **Two Antenna Input** Allow for dual antenna Input
- Extremely Flat Group Delay Less that 1ns variation
- High Isolation Option
  >35dB of isolation between adjacent output ports
- Phase Matched Outputs Phase  $(J1 - J2) < 1.0^{\circ}$

## Description

The DRMALDCBS2X32 GPS Rack Mount Amplified Splitter is a TWO input, thirty-two output device with –2dB max signal loss. The frequency response covers the GPS L1 & L2 bands with excellent gain flatness. In the normal configuration, the splitter is powered by a transformer that supplies power to the splitter's amplifier and roof antenna. The outputs are DC loaded with a  $200\Omega$  resistor to simulate the antenna current draw. This product is ideally suited for timing and testing applications where the GPS carrier signal is required by up to 32 GPS devices simultaneously.

Parameter	Conditions	Min	Тур	Max	Units
Freq. Range	Ant – Any Output, Unused Outputs - $50\Omega$	1.1		1.7	GHz
In/Out Imped.	Ant, J1, J2, J3, J4, J5, J6, J7, J8		50		Ω
Gain	Ant –Any Output, Unused Outputs, $-50\Omega$	13.0	14.0	15.0	dB
Gain-High Isolation	Ant – Any Output, Unused Outputs - $50\Omega$	-2.0	0.0	2.0	dB
Input SWR	All ports - 50 $\Omega$			2.0:1	-
Output SWR	All ports - 50 $\Omega$			1.3:1	-
Noise Figure	Normal Config., Ant – Any Output, Unused Outputs - $50\Omega$		3.8	4.3	dB
Gain Flatness	$\mid$ L1 – L2 $\mid$ ; Ant – Any Output, Unused Outputs - 50 $\Omega$		0.5	1	dB
Amplitude Balance	$\mid$ J1 – J2 $\mid$ ; Ant – Any Output, Unused Outputs - 50 $\Omega$			0.5	dB
Phase Balance	Phase (J1 – J2) ; Ant – Any Output, Unused Outputs - $50\Omega$			1.0	deg
Isolation	Hi Isolation Config, Adjacent Ports, Ant - $50\Omega$ (see plots)	35			dB
Group delay	$\tau_{d,max}$ - $\tau_{d,min}$ : Ant – J1, J2 - 50 $\Omega$ ; Ant – J2, J1 - 50 $\Omega$			1	ns
Flatness					
Current	Amplifier Current Draw @ $50\Omega$			15	mA

## Electrical Specifications, $T_A = 25^0 C$

## **Available Options**

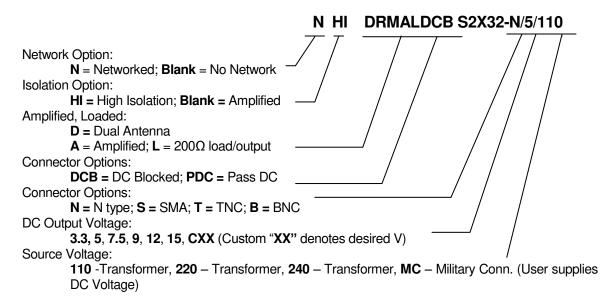
Network Power Supply				
Source Voltage Options	VOLTAGE INPUT	STYLE		
	110VAC	Transformer (Wall Mount)		
	220 VAC	Transformer (Wall Mount)		
	240 VAC (United Kingdom)	Transformer (Wall Mount)		
	Customer Supplied DC 9-32 VDC	Military Style Connector		
Output Voltage Options <sup>(1)</sup>	DC VOLTAGE OUT	MAX CURRENT OUT FOR CORRESPONDING Vout <sup>(2)</sup>		
	5 V	110mA		
	7.5V	130mA		
	9V	140mA		
	12V	170mA		
	15V	210mA		
	Custom	TDB		
Output Port Isolation Options				
Isolation Options	High Isolation, 35dB min. Output Port – to – Output Port			
Pass/Block DC Options				
DC Blocked <sup>(1)</sup>	Jx (x=132) is DC blocked, Pass DC to ANT.			
RF Connector Options				
Connector Options	CONNECTOR STYLE	CHARGE		
	Type N, TNC, SMA, and BNC	NC		

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

(2)  $TA = +50^{\circ}C$ . Assuming Source of 110V or 220V Wall Mount Transformer. In general, maximum output current can be determined by:

 $lout \leq 2.9 \ / \ (V_{source \ DC} - V_{out}) \ A$ 

## Part Number



## Mechanical

Dimensions:	Height:	5.4"
	Length:	18.0"
	Width:	17.0"
Weight:	16 lbs.	
Operating Temp. Range:	-40° to -	⊦ 75°C



Contact NavtechGPS for product details. www.NavtechGPS.com +1-703-256-8900 • 800-628-0885 • info@navtechgps.com