



# *DRMALDCBS2X16*

## *Dual Antenna Rack Mount Amplified 2x16 GPS Splitter Technical Product Data*



### Features

- Two Antenna Input
- Excellent Gain Flatness  
(J1 – J16) < 1.5dB
- Amplified 14dB Gain Typical
- DC Blocked Outputs Feature 200 ohm Loads
- LED Power Light
- -48VDC Power Option Available
- Durable Rugged Standard 3U Chassis
- Extremely Flat Group Delay
- High Isolation Option  
>35dB of isolation between adjacent output ports
- Phase Matched Outputs  
Phase (J1 – J2) < 1.0°

## Description

The DRMALDCBS2X16 GPS Rack Mount Amplified Splitter is a TWO input, sixteen output device. The frequency response covers the GPS L1 & L2 bands with excellent gain flatness. In the normal configuration, the splitter is powered by a receiver connected on J1 that supplies power to the splitter's amplifier and roof antenna. The outputs are DC loaded with 200Ω resistors to simulate the antenna current draw. Product is ideal for timing and testing applications where the GPS carrier signal is required by up to 16 GPS devices simultaneously.

## Electrical Specifications, T<sub>A</sub> = 25<sup>0</sup>C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – Any Output, Unused Outputs - 50Ω	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 - 50Ω	13	14.5	16.5	dB
Gain High Isolation	Ant – Any Output, Unused Outputs - 50Ω	-1.0	0.0	1.0	dB
Input SWR	All ports - 50Ω			2.0:1	-
Output SWR	All ports - 50Ω			1.5:1	-
Noise Figure	Normal Config., Ant – Any Output, Unused Outputs - 50Ω		3.8	4.3	dB
Gain Flatness	L1 – L2   ; Ant – Any Output, Unused Outputs - 50Ω		0.5	1	dB
Amplitude Balance	J1 – J2   ; Ant – Any Output, Unused Outputs - 50Ω			1.5	dB
Phase Balance	Phase (J1 – J2) ; Ant – Any Output, Unused Outputs - 50Ω			1.0	deg
Isolation	Hi Isolation Config, Adjacent Ports, Ant - 50Ω (see plots)	35			dB
Group delay Flatness	τ <sub>d,max</sub> - τ <sub>d,min</sub> : Ant – J1, J16 - 50Ω			5	Ns
Current	Amplifier Current Draw, All ports - 50Ω			15	mA

## Mechanical

Dimensions: Height: 5.4"

Length: 18.0"

Width: 17.0"

Weight: 13.6 lbs.

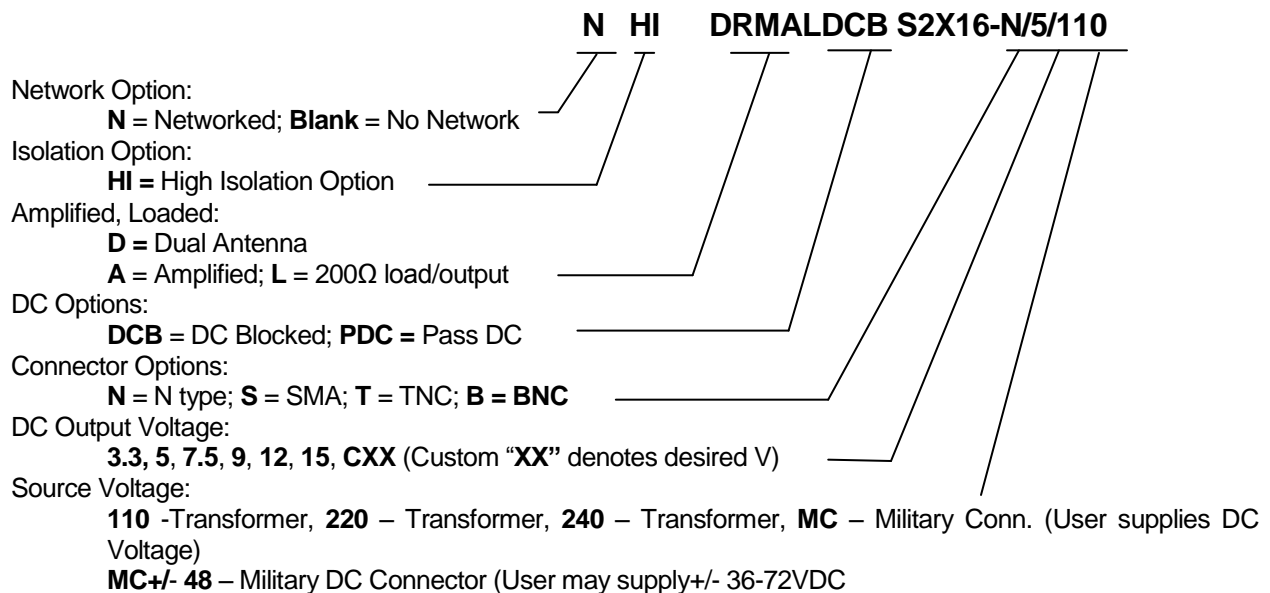
Operating Temp. Range: -40° to + 75°C

## 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)
Output Voltage Options <sup>(1)</sup>	Customer Supplied DC 9-32 VDC	Military Style Connector
	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		
High Isolation Option	High Isolation, 35dB min. Output Port – to – Output Port	
Pass/Block DC Options		
DC Blocked <sup>(1)</sup>	Jx (x=1...16) are 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) When no external power supply option is selected, Output 1/J1 is Pass DC Standard. When an external power supply is selected, all outputs are DC Blocked standard

## Part Number



Performance:

DRMALDCBS1X16 (STANDARD GAIN)

Input SWR (Ant. Port) and Frequency Response: Ant. To J1-J16 (typical N type connector)

