



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 200 Ω 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_A = 25⁰C

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

Mechanical

Dimensions: Height: 5.4"

Length: 18.0"

Width: 17.0"

Weight: 13.6 lbs.

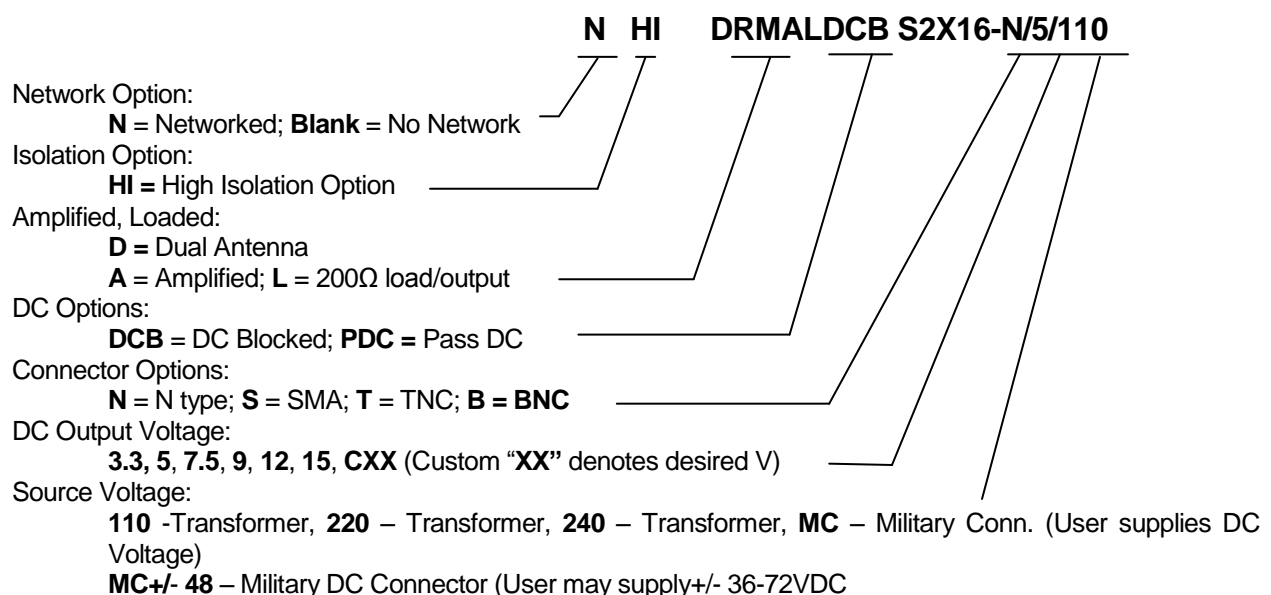
Operating Temp. Range: -40⁰ to + 75⁰C

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 ⁽²⁾
	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 ⁽¹⁾	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)

