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TECHNICAL PRODUCT DATA

RMS116 Splitter

Features

- Standard 19” Rack Mount Configuration
- Passes GPS, Galileo & GLONASS L1/L2
- Numerous Options Available

Description

The RMS116 Rack Mount Splitter is a one-input, sixteen-output GPS signal divider. This product typically finds application in a facility where an input from a single active GPS roof antenna is split evenly between sixteen outputs to create an indoor GPS signal distribution network. Typically the RMS116 is configured with an 110VAC input (230VAC also available) and a regulated DC output voltage is passed to the antenna input port in order to power an active GPS antenna on that port. In this scenario, the RF outputs (J1 – J16) would feature a 200 Ohm DC load to simulate an antenna DC current draw for any receiver connected to those ports.

The RMS116 splitter comes with many available options to meet your specific needs. Please call, fax, email (sales@gpssource.com), or visit our website (www.gpssource.com) for further information on product options or specifications.

RMS116 Splitter

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter		Conditions	Min	Typ	Max	Units
Freq. Range		Ant – Any Port, Unused Ports - 50 Ω	1.2		1.6	GHz
In/Out Imped.		Ant, J1-J16		50		Ω
Gain -Amplified (Std.) -Amplified (Cust)[1]		Ant – Any Port, Unused Ports - 50 Ω	 7 0	 8 TBD	 9 14	dB
Input SWR		All Ports 50Ω			2.0:1	-
Output SWR		All Ports 50Ω			2.0:1	-
Noise Figure		Ant – Any Port, Unused Ports - 50 Ω			3	dB
Gain Flatness(4)		|L1 - L2|, Ant – Any Port, Unused Ports - 50 Ω			3	dB
Amp. Balance		|J1 - J2|, Ant – Any Port, Unused Ports - 50 Ω			0.5	dB
Phase Balance		Phase (J1 - J2), Ant – Any Port, Unused Ports - 50 Ω			1.0	deg
Group Delay Flatness		$\tau_{d,max}$ - $\tau_{d,min}$, Ant – Any Port			1	ns
Isolation -Amplified (Hi Iso.)		Measured at 1227MHz and 1575MHz				
		Adjacent Ports: Ant - 50Ω	24			dB
		Opposite Ports: Ant - 50Ω	38			dB
AC IN	110	Wall Mount Transformer(3)		110		VAC
	220/240	Wall Mount Transformer (Various Intl. plug types available)(3)		230		VAC
DC IN	DC Blk	Any DC Blocked Port with a 200 Ω Load			14	VDC
	Pass DC -Amplified	Non-Powered Configuration, DC Input on J1	 3		 16	VDC
	Powered	Powered, Mil. Conn. or w/ leads Option	3(2)		28(2)	VDC
Device Current		Current Consumption of device, excludes Ant. Cur.			48	mA
Output Current		Input port			100(3)	mA
Max RF Input -Amplified		Max RF input without damage			0	dBm

Notes:

1. Custom gain options available
2. DC IN for powered option must be 2V greater than desired DC Voltage Out
3. Maximum combined DC current draw out all ports of the device is a function of the DC input voltage and desired DC output voltage , according to the following:

   $$I_{out} \leq 1.4 / (V_{DC\ IN} - V_{DC\ OUT}) - 0.048\ Amps$$

   For powered option with a wall mount transformer (Voltage Input = 110/220/240 VAC), VDC IN is 9V.
4. With variable gain option, gain flatness is 5.

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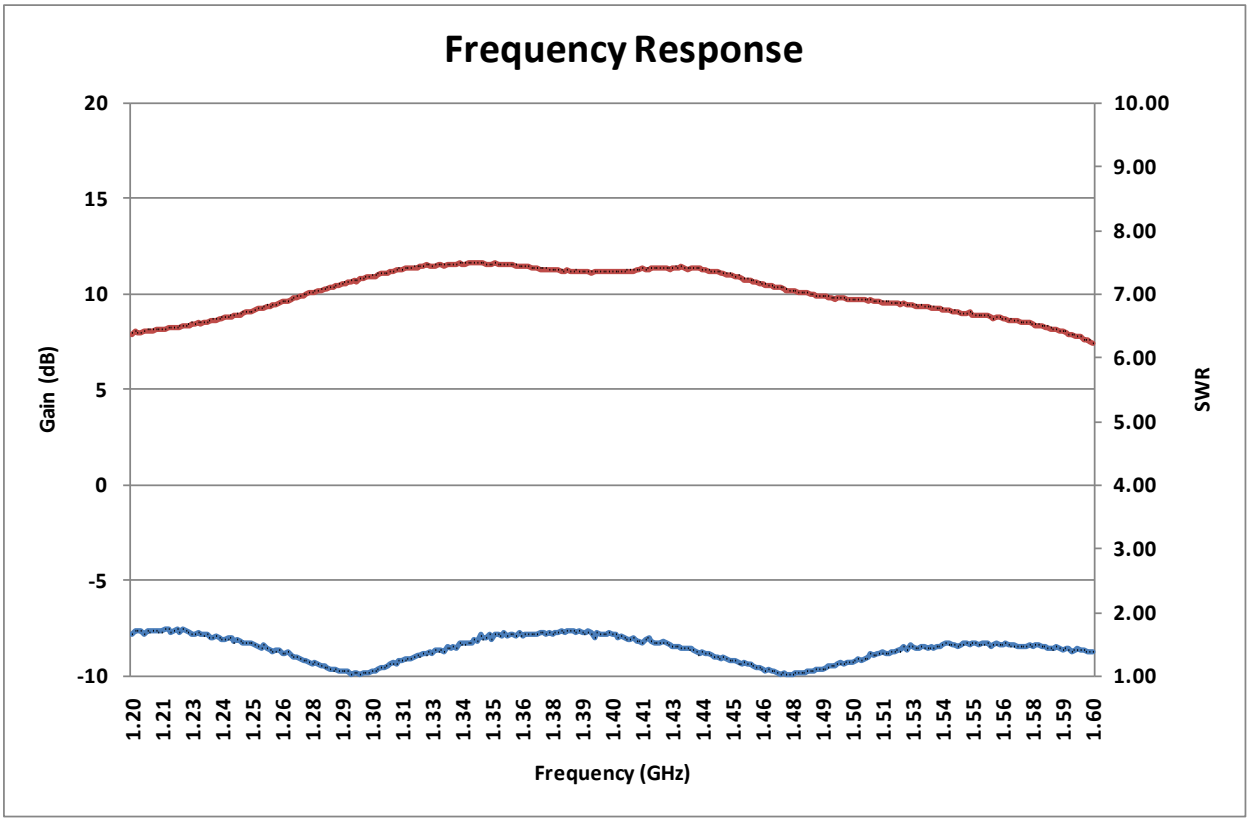
Performance Data

RMS116 Active - Hi Isolation



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Available Options:

Power Supply Options:		
Source Voltage Options	Voltage Input	Type
	110 VAC	Wall Mount Transformer
	220 VAC	Wall Mount Transformer
	240 VAC (U.K.)	Wall Mount Transformer
	DC 5-28 VDC	Military Style Connector or w/Quick Connects
Output Voltage Options(1)	DC Voltage Out	
	3.3	
	5	
	7.5	
	9	
	12	
	Variable (3-12V)	
	Custom	
RF Connector Options:		
Connector Options	Connector Type	Limitations
	N (Male & Female)	
	SMA (Male & Female)	
	TNC (Male & Female)	
Housing Options:		
Housings	Housing Type	Limitations
	19 x 8 x 1.75 in Rack Mount	None
Port Options:		
DC Blocked(1)	J1 – J16 are DC Blocked & 200Ω Loaded, DC is passed to ANT	

Notes:

1. RF outputs are DC Blocked standard. Call for special pass DC configurations.

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RMS116 Splitter

Part Number

RMS116 – AXX – P110 / 5 – NF

Product:
Standard 1x16Splitter
(Pass DC J1-Ant, J2 – J16 DC Blk.)

Gain Option:
A – Amplified

Source Voltage:
P110 – Transformer,
P220 – Transformer,
P240 – Transformer,
PDC – DC w/leads
PM – Military Connector (User supplies DC)

Output Voltage:
3.3, 5, 7.5, 9, 12, XX, V – Denotes Output Voltage
(XX – custom output voltage, V – variable)

Connector Options:
NF – N, Female
SF – SMA, Female
TF – TNC, Female

For help in creating the part number to meet your exact needs, contact us at Sales@gpssource.com or visit our website at www.gpssource.com .

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