

GPS Splitter 2 in 16 Rack Mount Splitter

Type: RMS216

Features:

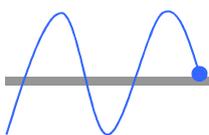
- - 16 GPS/GNSS Output Ports
- - -48VDC Power Supply Option
- - Embedded Antenna Health Sensor
- - Automatic Internal Antenna Port Switch
- - External Antenna Port Switching Capability
- - Passes GPS L1/L2, GLONASS L1/L2, Galileo, Compass
- - Antenna Fault Indicator Panel
- - Dual Power Option



Description:

The RMS216 allows up to 16 GPS/GNSS synchronization modules and receivers access to the GPS timing signal. It is designed with dual antenna redundancy to keep timing and synchronization modules operating when a GPS antenna or cable fails. A dual power supply option allows two internal power supply units to share the load. If one unit is not available (internally or externally), the other will seamlessly take over without any loss in power. It is perfect for many wireless applications. Typically, the RMS216 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. A Power-LED signals the operating condition of the device.

The RMS216 splitter comes with many available options to meet your specific needs. Please call or email us to (vertrieb@aucon.de) for further information on product options or specifications.



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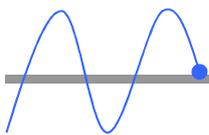
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Electrical Specifications, Operating Temperature -40 – 85° C

Parameter	Conditions	Min	Typ	Max	Unit	
Frequency Range	Ant(J1,J2) – Any Port, Unused Ports - 50 Ω	1.0		1.65	GHz	
In/Out Impedance	Ant(J1,J2) OUT1-OUT16		50		Ω	
Gain	Ant(J1,J2) – any Port, Unused Ports - 50 Ω	6	8	10	dB	
-Amplified (Std.) -Amplified (Cust.) ¹	As Specified (xdB, 0 to 14dB)	X - 2	X	X + 2		
Input SWR	All Ports 50Ω			2.0:1	-	
Output SWR	All Ports 50Ω			2.0:1	-	
Noise Figure	Ant(J1,J2) – any Port, Unused Ports - 50 Ω, Gain=8dB			5	dB	
Gain Flatness	L1 - L2 , Ant(J1,J2):any Port; Unused Ports -50Ω			3	dB	
Amp. Balance	J3 – J4 , Ant(J1, J2):any Port; Unused Ports - 50Ω			3	dB	
Phase Balance	Phase (J3 – J4), Ant(J1,J2) 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.) (Gain=0dB)	Measured at 1227 MHz and 1575 MHz				
		adjacent Ports: Ant - 50Ω	24		dB	
		opposite Ports: Ant - 50Ω	38		dB	
AC IN	110	Wall Mount Transformer	110		240	VAC
	220/230	Wall Mount Transformer (Various Intl. Plug types available) ⁽³⁾	110		240	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 Quick Connector, Supports -48VDC power supply	+ 20 - 20	+48		VDC
Device Current	Current Consumption of device, excludes Ant.			150	mA	
Output Current	Input Port			100 ⁽³⁾	mA	
Max RF Input -amplified	Max RF input without damage			20	dBm	

Notes:

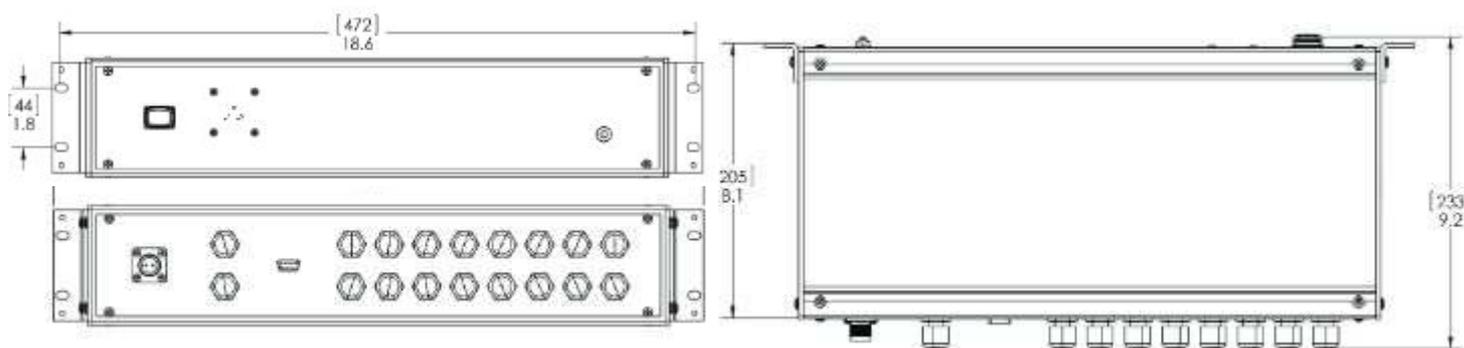
1. Custom gain options available



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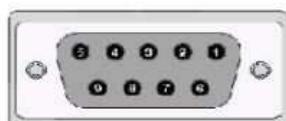
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Product Drawing:



Antenna Control Specifications:

Antenna control can be automatic with manual override. Automatic Control is the default option. The automatic control will automatically select the primary or alternate antenna based on the fault status of the two antennas. The fault status is determined by the current draw of the antennas. A current draw below 12.5mA and above 120mA will signal a fault for the respective input port. The fault condition will cause the device to automatically switch to the other input port. The fault status is displayed on the front panel and indicated via the DB9. The secondary antenna can be selected manually by activating an illuminated rocker switch on the front panel.

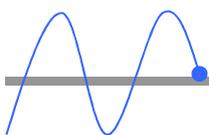


DB9(F) Pinout

Pin #	No Fault	Fault
Pin 6	Shorted to pin 7	Open to pin 7
Pin 8	Open to pin 7	Shorted to pin 7

The antenna and power status is available to an external application via a set of signals in the DB9 connector. The signals enable the external application to identify antenna faults at J1 and J2 or a

faulty power input. The fault status is output via a SPDT relay. The relay is energized when unit is powered and no fault is present. The relay will be deenergized when a fault is present or when power is off. An available factory option, reverses the energized position. The relay can switch up to 100mA at up to 60VDC or 60VAC. The normally open contact, the normally closed contact, and the common are brought out in the rear panel DB9 connector.

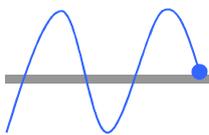


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Available Options:

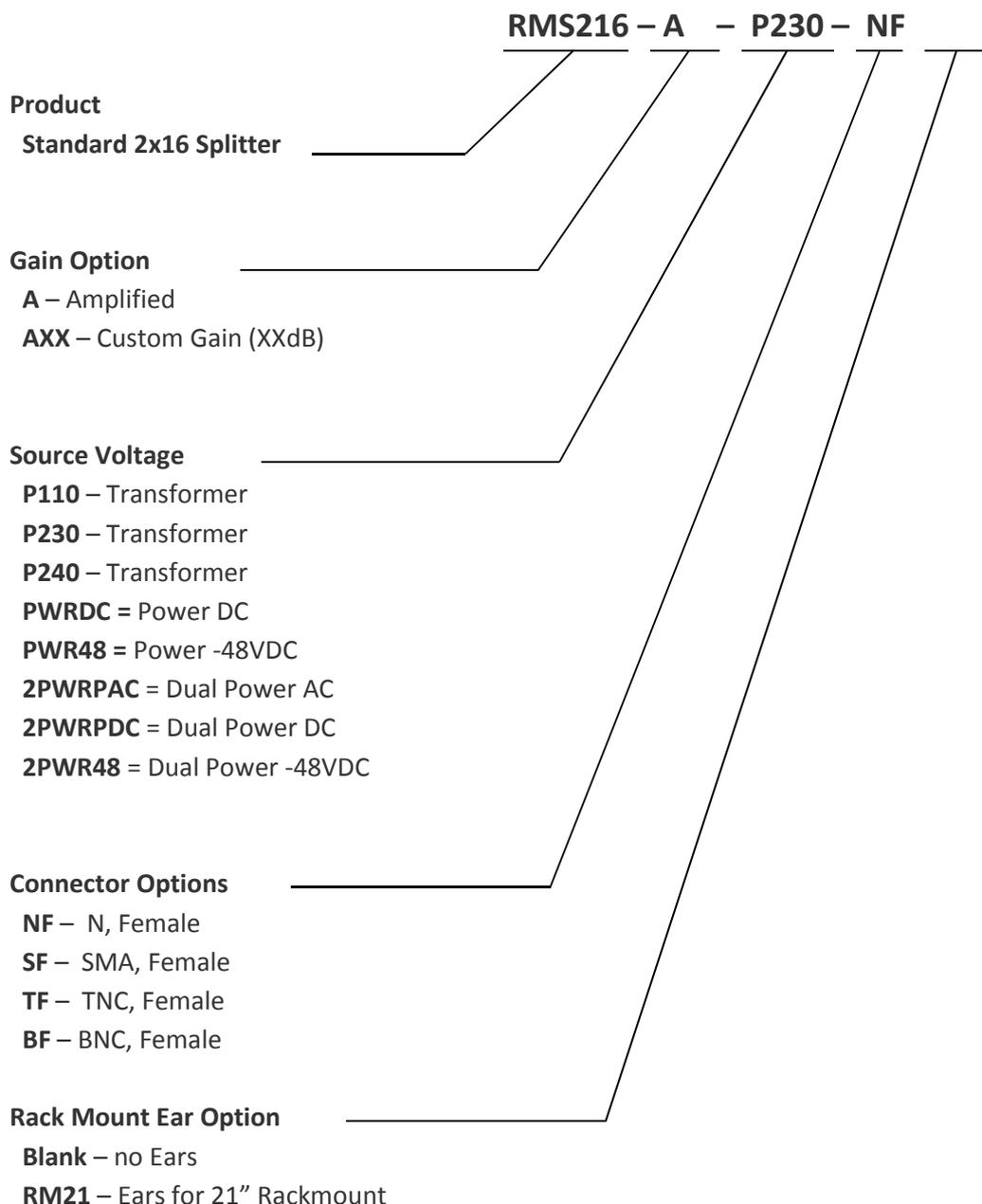
Power Supply		
Source Voltage Options	Input Volt	Type
	110 VAC	Wall Mount Transformer
	230 VAC	Wall Mount Transformer
	240 VAC (U.K.)	Wall Mount Transformer
	±20V bis ±50V	Military Style Connector or Quick Connect
Output Voltage	DC Volt Output	
	5.0	
Connectors		
Options	Connector Typ	Limitations
	N (Male & Female)	
	SMA (Male & Female)	
	TNC (Male & Female)	
	BNC (Male & Female)	No Warranty
Housing		
Housings		Limitations
	19 x 8 x 3.5 in Rack Mount	none
Port Options		
DC Blocked	J2 – J16 are DC blocked with 200Ω, DC from J1 to ANT1 and J2 to ANT2	



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Structure of Part Number:



For help in creating the part number to meet your exact needs, call us or contact us at vertrieb@aucon.de.