# DATASHEET

## RRMS116 RUGGEDIZED RACK MOUNTABLE GPS SPLITTER 2U with 16 ports

### **KEY FEATURES**

Low noise figure

Standard gain of 8 dB

Excellent gain flatness Gain | L1 - L2 | < 3 dB

Size: 2U

Designed to pass DC power up to the GPS antenna

Passes GPS L1/L2

Supports MIL-STD-704 or MIL-STD-1275 compliant 28VDC power supply



## RRMS116

#### Split GPS Signal Between Multiple Receivers

GPS Source, Inc. provides worldclass military GPS solutions for applications where the signal is denied.

The Ruggedized Rack Mountable GPS Splitter (RRMS116) is a professional product built for years of trouble-free performance in demanding applications. It has been specifically engineered for the military and environments susceptible to increased levels of shock and vibration, as well as elevated ambient temperatures.

#### Uncompromising Performance

This splitter is built for military applications and environments where high reliability is required.

#### Benefits

Supports up to 16 devices requiring GPS and timing

Works well in EMI rich environment

Built for extreme mission environments

Designed for easy installation and configuration

Fits in standard 19" rack mount



## RRMS116



#### **Specifications**

Number of Ports				16	
Frequency Range			Ant: Any Port; Unused Ports: $50\Omega$	1 - 1.7 GHz	T.
In/Out Impedence			Ant: J3-J18	50 (typ)	
Gain	Standard	Amplified	Ant: Any Port; Unused Ports: $50\Omega$	8 dB (typ)	8.0
	Custom	Amplified	As Specified (xdB, from 0 to 14dB)	X ± 1.5 dB	
Input SWR			All Ports 50Ω	2:1 (max)	
Output SWR			All Ports $50\Omega$	2:1 (max)	-
Noise Figure			Ant: Any Port; Unused Ports: $50\Omega$	4.5 dB (max)	
Gain Flatness			L1-L2  Ant: Any Port; Unused Ports: $50\Omega$	4 dB (max)	
Amp. Balance			[J2 - J3] Ant: Any Port; Unused Ports: $50\Omega$	.5 dB (max)	
Phase Balance			Phase [J2] Ant: Any Port; Unused Ports: $50\Omega$	2.0 Degree (max)	
Group Delay Flatness			T <sub>d,max</sub> - T <sub>d,min</sub> ; Ant: Any Port	1.0 ns	
Isolation (Hi Iso.)			Adjacent Ports: Ant - $50\Omega$ Opposite Ports: Ant - $50\Omega$	27 dB (min) 31 dB (min)	
Input IP3			Ant: Any Port; Unused Ports: $50\Omega$ (1MHz Tone Spacing)	-21 dBm (typ)	
Input P1dB			Ant: Any Port; Unused Ports: $50\Omega$	-31 dBm (typ)	
Current (I <sub>internal</sub> )			Current Consumption of device (excl. draw)	220 mA (max)	
Draw Current			Powered, Military or Quick Connect	100 mA (max)	
Max RF Input			Max RF Input Without Damage	20 dBm ( max)	
Mechanica	al Data		·	·	
Weight				7.5 lb	
Size			19 X 8 X 3.5 in Rack Mount		
Power Options (Multiple)			PMS-1275, PMS704, MS38999-1275, PMS38999-704		



ISOMETRIC VIEW FOR REFERENCE ONLY

RRMS116

#### Electromagnetic Interference and Compatibility Test

RRMS116 performs its intended function and operation without degrading the performance of other equipment or subsystems. The following table defines the test requirements and test procedures for conducting the required electromagnetic compatibility testing. The MS18 is designed and tested to meet the requirements of MIL-STD- 461E:

CE102	Conducted Emissions Power Leads	10kHz to 10MHz		
CE106	Conducted Emissions Antenna Terminal	10kHz to 31.5GHz		
CS101	Conducted Susceptibility Power Leads	30Hz to 150kHz		
CS103	Conducted Susceptibility Antenna Port	Intermodulation		
CS105	Conducted Susceptibility Antenna Port	Cross-Modulation		
CS114	Conducted Susceptibility Bulk Cable Injection	10kHz to 200MHz		
RE102	Radiated Emissions Electric Field	10kHz to 18GHz		
RS103	Radiated Susceptibility Electric Field	2MHz to 18GHz		
Indirect Lightning	Damped Sinusoidal transients	RF Leads,10kHz to 100MHz   Power Leads,10kHz to 100MHz		

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