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 world-class 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

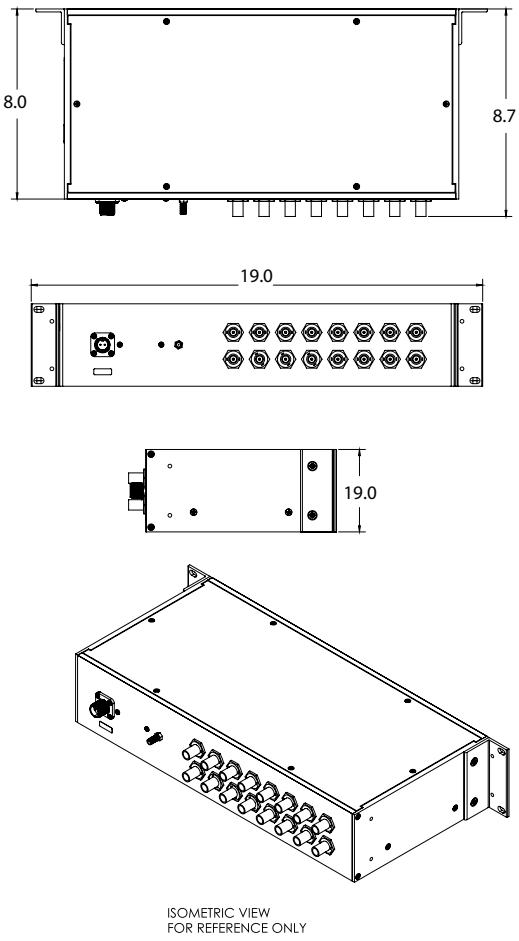
Built for extreme mission environments

Designed for easy installation and configuration

Fits in standard 19″ rack mount

Specifications

Number of Ports				16
Frequency Range			Ant: Any Port; Unused Ports: 50Ω	1 - 1.7 GHz
In/Out Impedence			Ant: J3-J18	50 (typ)
Gain	Standard	Amplified	Ant: Any Port; Unused Ports: 50Ω	8 dB (typ)
	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 50Ω	2:1 (max)
Noise Figure			Ant: Any Port; Unused Ports: 50Ω	4.5 dB (max)
Gain Flatness			|L1-L2| Ant: Any Port; Unused Ports: 50Ω	4 dB (max)
Amp. Balance			[J2 - J3] Ant: Any Port; Unused Ports: 50Ω	.5 dB (max)
Phase Balance			Phase [J2] Ant: Any Port; Unused Ports: 50Ω	2.0 Degree (max)
Group Delay Flatness			$T_{d,max}$ - $T_{d,min}$; Ant: Any Port	1.0 ns
Isolation (Hi Iso.)			Adjacent Ports: Ant - 50Ω Opposite Ports: Ant - 50Ω	27 dB (min) 31 dB (min)
Input IP3			Ant: Any Port; Unused Ports: 50Ω (1MHz Tone Spacing)	-21 dBm (typ)
Input P1dB			Ant: Any Port; Unused Ports: 50Ω	-31 dBm (typ)
Current ($I_{internal}$)			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)
Mechanical 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 compatibiity 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

AS9100 & ISO 9001:2008 Certified
Veteran Owned Small Business
CCR Registered
CAGE: 1RTJ5
DUNS: 883995677
NAICS: 334220, 334290, 334511, 541330, 541690

GPS Source, Inc.
64 Mission Drive
Pueblo, CO 81007 USA
T: +1 719 561 9520
F: +1 719 565 0890
E: defense@gpssource.com

GPSS Operations Enabled