



MIL-LDCBS1X4

Military 3Z4'GPS Ur rkwgt

Technical Product Data



Features

- **Passes all GNSS Frequencies (Entire L-band)**
- **Extremely Flat Group Delay**
Less than 1ns variation
- **Military Qualified 1X2 Splitter**
MIL STD 810F, MIL STD 704, MIL STD 1275B
- **Low Insertion Loss**
- **DC Blocked Outputs Feature 200Ω Loads**
Prevent antenna alarm faults from connected devices
- **Phase Matched Outputs**
Phase (J1 – J2) < 1.0°
- **Special Configurations Available By Request**
- **Qual Test Summary Certification Available**

NavtechGPS

+1-703-256-8900 or 800-628-0885

info@NavtechGPS.com

www.NavtechGPS.com

Description

The MIL-LDCBS1X2 GPS Splitter (GNSS Splitter) is a one input, two output passive splitter based on the Wilkinson splitter design. The frequency response covers the entire L-band (all GNSS Frequencies). All Mil Spec splitters passed rigorous MIL-STD 810F testing detailed in the separate Qual Test Summary Certification. The MIL-LDCBS1X2 is standard hermetically sealed, EMI Shielded, Weatherproofed and configured with MIL-STD-704 or MIL-STD 1275B compliant power options. Each DC blocked output is loaded with a 200Ω resistor to simulate the antenna current draw to prevent false antenna alarm faults. Contact GPS Networking Technical Support for any questions regarding standard configurations or special configurations at salestech@gpsnetworking.com or 1-800-463-3063.

Electrical Specifications, $T_A = 25^{\circ}\text{C}$

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range	Ant – Any Output, Unused Outputs - 50Ω	1.1		1.7	GHz
Input/Output Impedance	Ant, J1, J2		50		Ω
Input SWR	All ports - 50Ω			2.0:1	-
Output SWR	All ports - 50Ω			1.5:1	-
Insertion Loss	Ant – Any Output, Unused Outputs - 50Ω	-3.5	-4.6	-5.7	dB
Flatness	J1 - J2 ; Ant – Any Output, Unused Outputs - 50Ω			1.0	dB
Amplitude Balance	J1 - J2 ; Ant – Any Output, Unused Outputs - 50Ω			1.0	dB
Phase Balance	Phase (J1 - J2) ; Ant – Any Output, Unused Outputs - 50Ω			1.0	deg
Isolation	Opposite Ports: Ant - 50Ω	20			dB
Group delay Flatness	$\tau_{d,max} - \tau_{d,min}$: Ant – J1 – J2 - 50Ω ; Ant – J2, J1 - 50Ω			1	ns

External Power Options (Networked Option)

Network Power Supply		
Source Voltage Options	VOLTAGE INPUT	STYLE
	110VAC	Transformer (Wall Mount)
	220 VAC (2 prong Euro)	Transformer (Wall Mount)
	240 VAC (3 prong UK style)	Transformer (Wall Mount)
	Customer Supplied DC (9-32 VDC)	2-pin Military DC Connector
Output Voltage Options ⁽¹⁾	DC VOLTAGE OUT	MAX CURRENT OUT FOR CORRESPONDING Vout
	3.3V	110mA
	5V	125mA
	9V	140mA
	12V	180mA
	15V	220mA
	Custom	TDB
Standard DC Configuration without External Power Option		
	J1/Output 1 Pass DC, J2/Output 2, Block DC, Input Port Pass DC	
Standard DC Configuration with any External Power Option (AC/DC or Military DC)		
	All DC Blocked Outputs feature 200Ω Load in Standard Configuration	
	User Selected Output DC Voltage	
RF Connector Options		
Connector Options	CONNECTOR STYLE	CHARGE
	Type N-female	NC
	Type SMA-female	NC
	Type TNC-female	NC
	Type BNC-female	NC

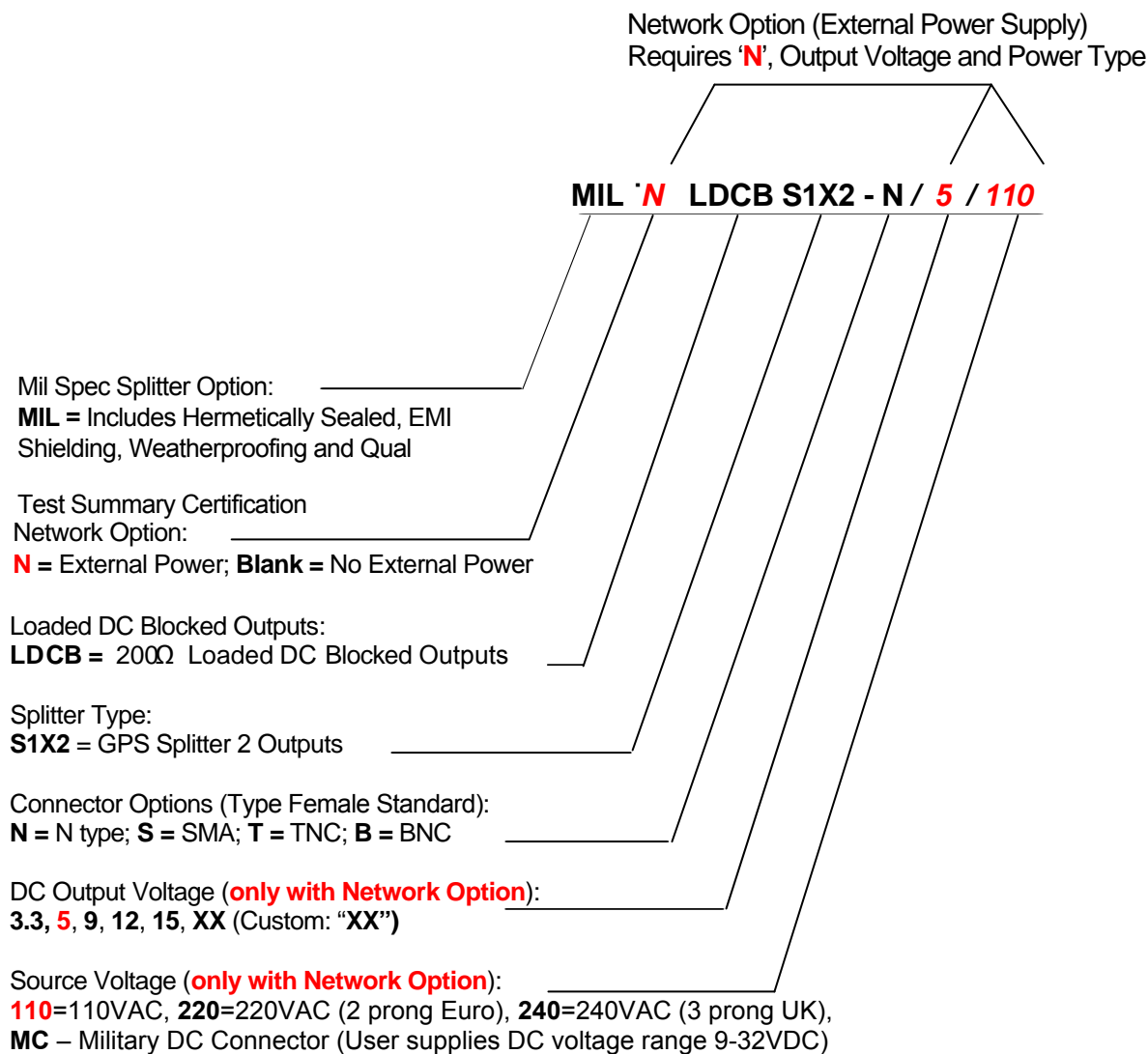
(1) With Networked Option, any RF port (input or output) can be selected Pass DC or Block DC.

(Contact GPS Networking Technical Support at 719-595-9880 or salestech@gpsnetworking.com for any questions regarding non-standard configurations and corresponding part numbers)



Contact NavtechGPS for product details. www.NavtechGPS.com
+1-703-256-8900 • 800-628-0885 • info@navtechgps.com

Part Number Configuration



(Military DC Mating Connector is included standard with the MC power option)

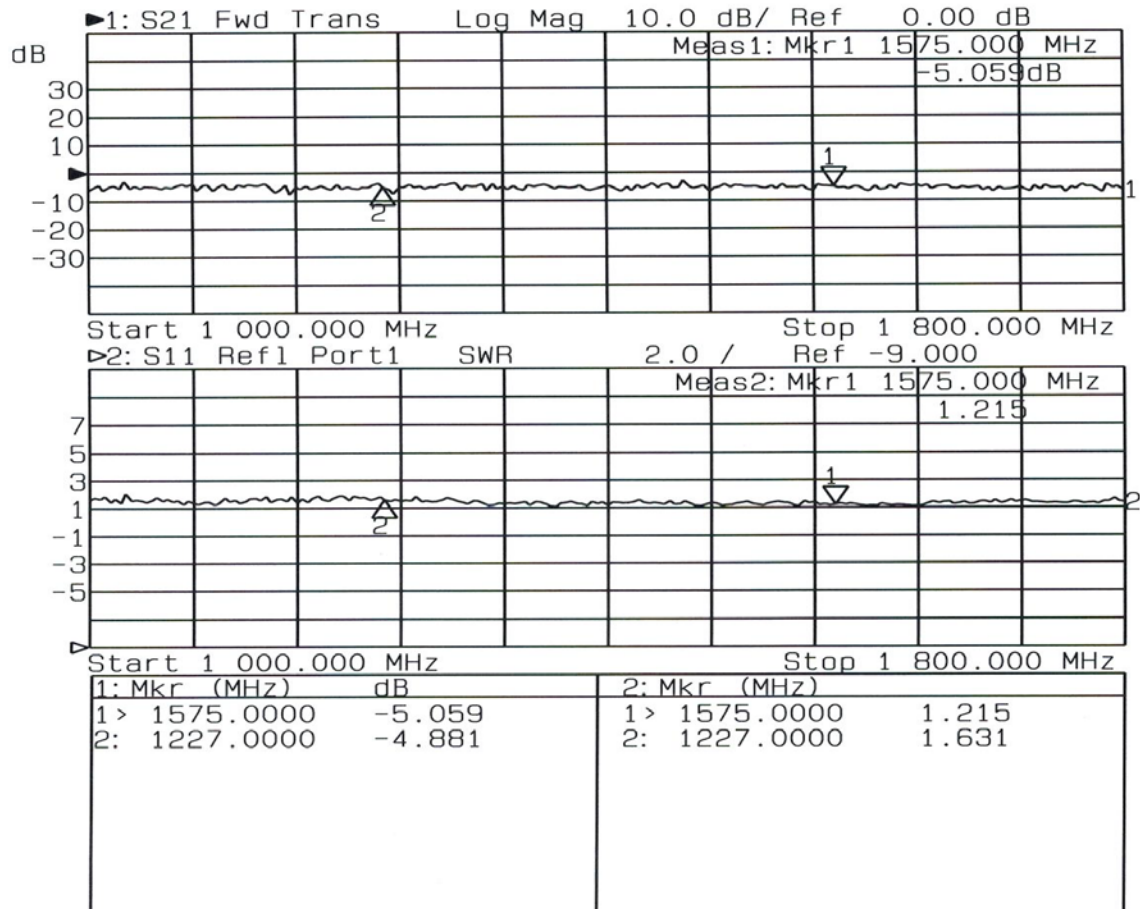
When no external power supply option (AC or DC) is selected, Output 1/J1 is Pass DC standard.
Whenever an external power supply option is selected, all outputs are DC blocked standard.

(Contact GPS Networking Technical Support at 719-595-9880 or salestech@gpsnetworking.com for any questions regarding non-standard configurations and corresponding part numbers)

Performance

MIL-LDCBS1X2 (Typical, Type N-female connectors)

Input SWR (Ant. port) and Frequency Response: Ant. To J1, J2, (Typical, Type N connectors)



Mechanical

Dimensions: Height: 1.3"

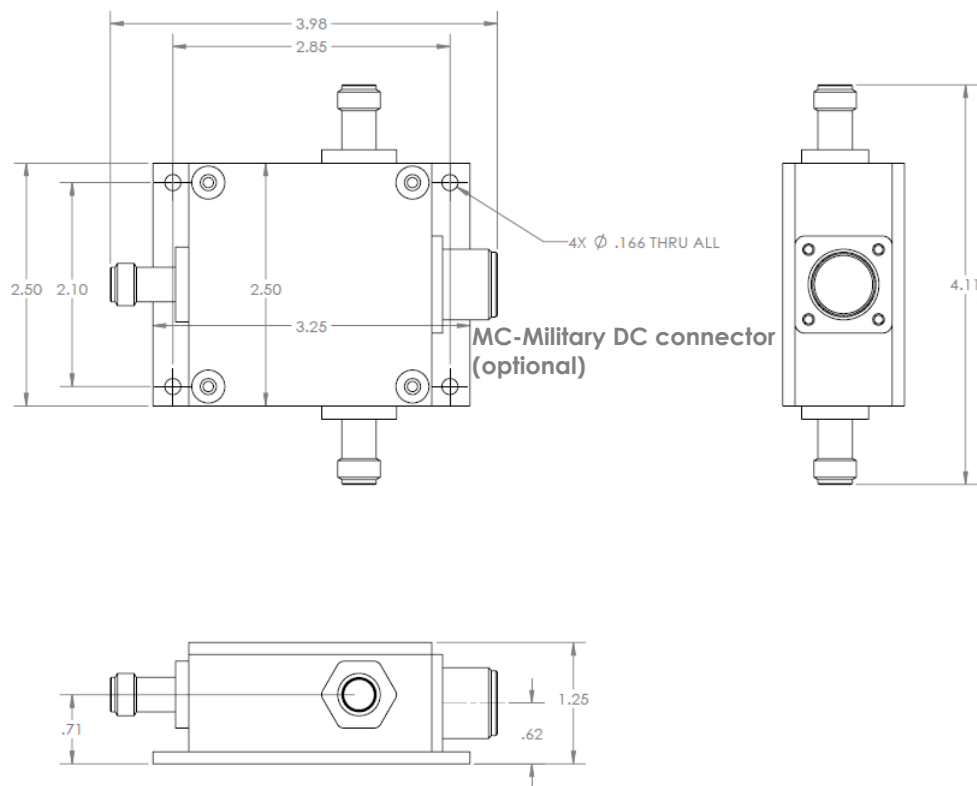
Length (not including connectors) Body: 2.5"
Base Plate: 3.25"

Width (not including connectors): 2.5"

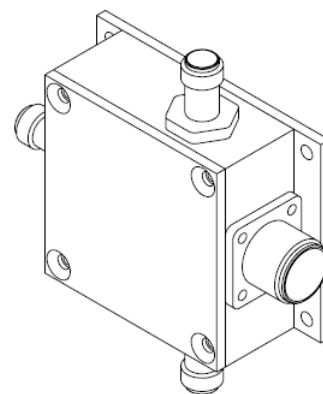
Weight: 12 oz. (344 grams)

Operating Temp. Range: -40° to + 75°C

Finish Housing and Base Plate: ELECTROLESS NICKEL PLATED
MIL-C-26074C CLASS 1, .0001-.0003 MAX
Finish Lid: ANODIZE, TYPE II, CLASS 2, BLACK, per MIL-A-8625



REVISIONS				
ZONE	REV.	DESCRIPTION	REV. BY	DATE
-	A	INITIAL RELEASE	-	---



GPS NETWORKING		Assy, 1x2		Do Not Scale Draw. Remove All Burrs And Sharp Edges to .000 Rad Max	
Part No.	BPC	Date	06/22/15	Design Eng	
Checked By		Qty	1	Prod Eng	
Title		Quantity / Unit Assy		Mat Treatment	
Mat Angle Protection		Release		See Note	
Draw Number	Assy, 1x2	Size	B	Rev	1 OF 1
SHEET		SHEET		1 OF 1	