



# GPS TIMING REFERENCE SPLITTER

## S14GT

Designed for the L band frequency, this splitter makes it possible to use a single GPS referencing antenna and cable arrangement for multiple synchronization systems.

The S14GT features an antenna DC bias select circuit. This allows for the active antenna DC input to be applied to any or all RF outputs. With this feature, one DC voltage will be chosen to power the antenna while other inputs will be switched to DC loads. Designed for redundancy, if the selected DC bias input should fail, the DC bias will automatically switch to another DC input to ensure an uninterrupted supply to the active antenna.



## Key Features

- Delivers L band frequency signals to multiple GPS synchronization modules and receivers
- Amplified to offset splitter losses
- Weatherproof housing for demanding environments
- High isolation

## Key Benefits

- Optimum signal quality with low noise and high gain
- Designed to support long-lasting, trouble free deployment
- DC bias select automatically switches port if selected DC bias input fails

Operating Temperature -40°C to 85°C

Parameter	Conditions	Min	Typ	Max	Units
<b>Frequency Range</b> <sup>(1)</sup>	Ant: Any Port; Unused Ports: 50Ω	1		2	GHz
<b>Gain</b>	Ant: Any Port; Unused Ports: 50Ω (Gain can be 0dB or 10dB)	-2	0	+2	dB
<b>Input/Output SWR</b>	All Ports 50Ω		2:0:1		—
<b>Noise Figure</b>	Ant: Any Port; Unused Ports: 50Ω, Gain = 0dB			2	dB
<b>Gain Compression Point (IP1dB)</b>	Gain = 0dB	-32			dBm
<b>3rd Order Intercept (IIP3)</b> (Gain = 0dB)	f1 = 1600.42MHz f2 = 1625.42MHz 2f1 - f1 = fL1	-24			dBm
<b>RF Input (Damage Threshold)</b>	Max RF Input Without Damage			0	dBm
<b>Amp. Balance</b>	[J1 – J2] Ant: Any Port; Unused Ports: 50Ω			1	dB
<b>Phase Balance</b>	Phase (J1 – J2) Ant: Any Port; Unused Ports: 50Ω			1	Degree
<b>Delay - Amplified</b>	Ant: Any Port; Unused Ports: 50Ω, L1			5	ns
<b>Isolation - Amplified</b> (Gain = 0dB)	Adjacent Ports: Ant – 50Ω	30			dB
	Opposite Ports: Ant – 50Ω	40			dB
<b>DC IN</b>	DC Input on any RF Output	3.3		12	VDC
<b>Device Current</b>	Current Consumption of Active Device (excludes Ant. Cur.)		18	20	mA
<b>Ant/Thru Current</b> <sup>(2)</sup>	Max Source DC Current Through Device			250	mA

- Notes: 1. Frequency range includes GPS L1, GLONASS L1, and GALILEO E1  
 2. Maximum current available from the DC source through the S14GT when output of S14GT is short circuited.

