



S18GT

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

The S18GT 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 carrier 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
Frequency Range	Ant: Any Port; Unused Ports: 50Ω ⁽¹⁾	1		2	GHz
Gain	Ant: Any Port; Unused Ports: 50Ω (Gain can be 0dB or 10dB)	-2	0	2	dB
Input/Output SWR	All Ports 50Ω			2	—
Noise Figure	Amplified Ant: Any Port; Unused Ports: 50Ω, Gain = 0dB			3	dB
Gain Compression Point (IP1dB)	Gain = 0dB	-32			dBm
3rd Order Intercept (IIP3) (Gain = 0dB)	f1 = 1600.42MHz f2 = 1625.42MHz 2f1 – f2 = fL1	-24			dBm
RF Input (Damage Threshold)	Maximum RF input without damage			0	dBm
Amp. Balance	[J1 – J2] Ant: Any Port; Unused Ports: 50Ω			1	dB
Phase Balance	Phase (J1 – J2) Ant: Any Port; Unused Ports: 50Ω			1	Degree
Delay	Ant: Any Port; Unused Ports: 50Ω, L1			5	ns
Isolation (Gain = 0dB)	Adjacent Ports: Ant – 50Ω	28			dB
	Opposite Ports: Ant – 50Ω	34			
DC IN	DC Input on Any RF Output	3		12	VDC
Device Current	Current Consumption of Active Device (excludes Ant. Cur.)		18	20	mA
Ant/Thru Current ⁽²⁾	Max Source DC Current Through Device			250	mA

- Notes: 1. Frequency range includes GPS L1, GLONASS G1, and GALILEO E1.
 2. Maximum current allowed from the DC source through the S18GT when output of S18GT is short circuited.

