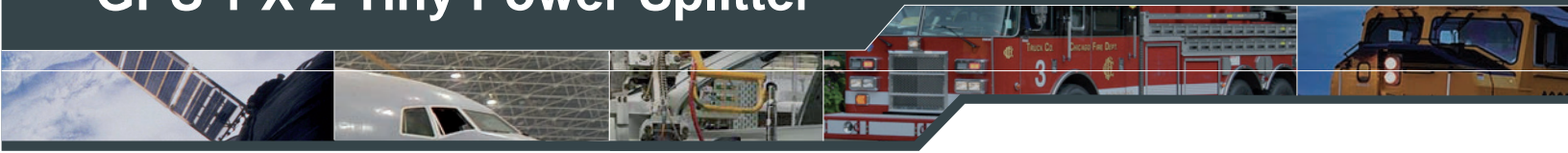


# GPS 1 X 2 Tiny Power Splitter



## S12T

### FOCUS ON SWaP - ELIMINATE 2ND GPS ANTENNA



#### INTRODUCTION

The S12T is a GPS splitter that is small and light, perfect for unmanned aerial vehicles (UAVs). This tiny splitter delivers full size performance, distributing real-time, up-to-date GPS signal, supporting embedded GPS technology. It is supplied in a rugged metal enclosure with SMA input and output connectors, providing dependable signals for two GPS enabled devices. This device will simplify the addition of a second GPS receiver to any existing system. It can be used with any existing antenna and cable such as GPS Source's RG316, a common aircraft rated cable that is good for short distances.

The built-in amplification overcomes splitter losses. It can be cascaded without adding separate amplifiers and bias-tees between splitters if configured to pass DC from the RF output.

#### KEY FEATURES

- » Lightweight, low profile design
- » Low power requirement
- » Passes L1/L2 GPS, Galileo & GLONASS
- » Amplified and passive versions available
- » Waterproof Option Available
- » Mil Spec Options Available

#### LESS SIZE AND WEIGHT WHERE IT COUNTS

With a total weight of 30 grams and overall dimensions of 1.875" x 1.75" x .475", this splitter is ideal for unmanned aerial systems.

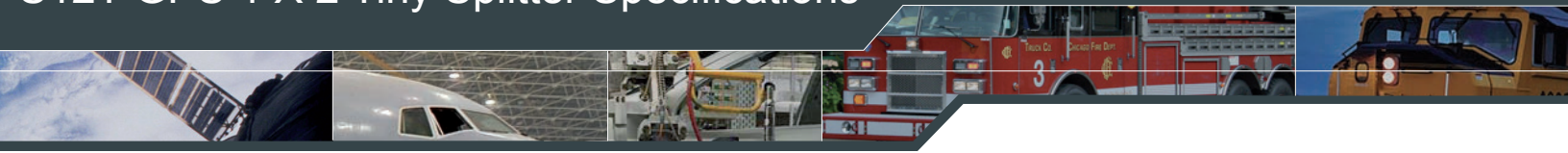
#### DC POWER MAKES INSTALLATION EASY

This splitter operates on the 1 - 2GHz carrier frequency. It can utilize the existing inline DC voltage that is currently powering the antenna (i.e. amplified). Normally, one output is a DC pass-through to power the antenna from one of the devices connected to it. This conveniently eliminates the need for a separate DC power supply and wiring. The low current draw (10mA max), will minimize the effect on power consumption.

[www.gpsource.com](http://www.gpsource.com)



# S12T GPS 1 X 2 Tiny Splitter Specifications



## OUTPUT PORTS

- » Number of ports 2

## ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical)
  - Input: 1.8:1
  - Output: 1.8:1
- » Bandwidth 1 - 2 GHz
- » Gain (typical)
  - Normal 8dB
  - Custom 0-8dB
- » Loss (passive) -4dB
- » Gain flatness 2dB
- » Noise figure 1.8dB
- » Isolation
  - Normal 16dB min.
  - Hi isolation 30dB min.
- » DC operating level 3-16 DC
- » Operating current 10mA (max)
- » Pass through current 200mA/per port
- » Group delay 1ns

## PHYSICAL SPECIFICATIONS

- » RF connectors
  - SMA (m, f)
  - SMB (f)
  - SMC (f)
- » Weight .07 lbs (30 grams)
- » Operating temperature -40 to 85°C
- » Size 1.875 x 1.75"

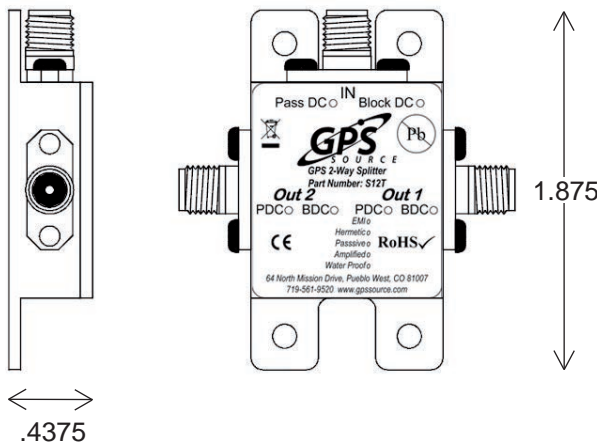
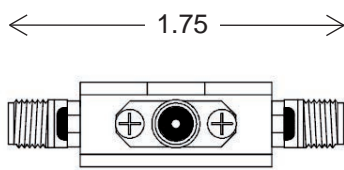


## AVAILABLE OPTIONS

- » Power
  - Inline DC Voltage
  - Outputs can be passed or DC blocked
  - Input port or antenna voltage can be passed or blocked
- » 200 ohm load to prevent antenna fault alarms from connected GPS receivers
- » Amplified, Custom Gain 0 to 8dB
- » Passive
- » EMI
- » Hermetically Sealed
- » Waterproof
- » Mil Spec Design Available - Call for more information

## ORDERING INFORMATION

Contact GPS Source for pricing/availability  
 Performance data available online  
 1 x 2 Tiny GPS Splitter



www.gpssource.com

