**GPS 1 X 2 Tiny Power Splitter** 

# S12T Focus on SWaP - Eliminate 2ND GPS antenna



# **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

## 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.

# LESS SIZE AND WEIGHT WHERE IT COUNTS

With a total weight of 30 grams and overall dimensions of  $1.875" \times 1.75" \times .475"$ , 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.

GPS LIVE INSIDE

www.qpssource.com





# S12T GPS 1 X 2 Tiny Splitter Specifications

### OUTPUT PORTS

»	Number of ports	2
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### ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical) Input: 1.8:1 Output: 1.8:1
   » Bandwidth 1 - 2 GHz
   » Gain (typical)

8dB

0-8dB

-4dB

2dB

1.8dB

16dB min.

30dB min.

10mA (max)

200mA/per port

3-16 DC

1ns

Normal Custom Loss (passive)

- » Gain flatness
- » Noise figure
- » Isolation
  Normal
  Hi isolation
- » DC operating level
- » Operating current
- » Pass through current
- » Group delay

### 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"



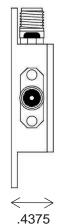
### AVAILABLE OPTIONS

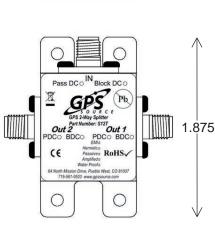
- » Power
  - Inline DC Voltage
  - Outputs can be passed or DC blocked
  - Input port or antenna voltage can be passed or blocked
- » 200 ohm load to prevent antenna fault alarms from connected GPS receivers
- » Amplified, Custom Gain 0 to 8dB
- » Passive
- » EMI
- » Hermetically Sealed
- » Waterproof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

### ORDERING INFORMATION

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







1.75

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### www.gpssource.com

