# **S12T**

# Smallest active Splitter - perfect for UAV's and mobile applications



# **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 AuCon's AUC316, 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 4,45 x 4,67 x 1,11 cm, this splitter is ideal for unmanned aerial systems and mobile applications.

# 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.









» Number of ports

### **ELECTRICAL SPECIFICATIONS** »

Input/ Output impedance 50  $\Omega$  » SWR all ports (typical)

Input: 1.8:1

Output: 1.8:1

>> Bandwidth 1 - 2GHz

» Gain (typical)

Normal 8 dB
Custom 0-8 dB
Loss (passive) -4 dB

» Gain flatness 2 dB

» Noise figure 1.8 dB

» Isolation

Normal 16 dB min.
Hi isolation 30 dB min.

DC operating level 3-16 DC

Operating current 10 mA (max)

200 mA / port

» Group delay
1 ns

» Pass through current

PHYSICAL SPECIFICATIONS

» RF connectors SMA (m, f) SMB (f) SMC (f)

- » Weight 30 grams (.07 lbs)
- » Operating temperature -40 to 85°C
- » Size 44,6 x 46,7 x 11,2 mm (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 AuCon for pricing/availability Peformance data and CoC available 1 x 2 Microhousing GPS Splitter















