



S12S

GPS 1 X 2 Slimline Splitter

KEY FEATURES

- » Multiple ports eliminates expense of second antenna or cable run
- » Ability to share existing antenna with two GPS receiver devices
- » Passes GPS, Galileo & GLONASS L1/L2
- » Amplified and passive versions available
- » High Isolation
- » Waterproof Option Available
- » Base Station Applications
- » Perfect for Both Timing & Position Applications

INTRODUCTION

When you need a GPS splitter that is lighter and thinner than the original S12, the S12S is the answer. Made for tight spots, the S12S Slimline GPS Splitter, enables the use of a single GPS antenna and cable for multiple synchronization devices. Designed for both manufacturing and position / timing redundancy applications, the S12 Active Splitter provides dependable signals for two GPS receivers. The antenna splitter can be used with any RF coax-based antenna such as GPS Source's LMR400. It has a standard gain of 24dB at the GPS L1 frequency band.

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.

HIGH ISOLATION PREVENTS OSCILLATION PROBLEMS

Interaction between multiple GPS receivers is eliminated, because of S12S's high isolation. Without this isolation design, local oscillation leakage can prevent other receivers from acquiring GPS signals and maintaining lock. Poor isolation can disable cell sites in a wireless base station application.

GPS Source's S12S Slimline Splitter has a minimum of 30dB isolation at GPS frequencies between the output ports.

DC POWER MAKES INSTALLATION EASY

This splitter operates on the GPS L1/L2 carrier frequency. Normally, one output is a DC pass-through to power the antenna from the equipment to which it is connected. It also passes on DC power for the GPS receiving antenna or other GPS line amplifier. This conveniently eliminates the need for a separate DC power supply and wiring. The splitter can obtain power from a GPS receiver connected to any port.



An AS9100 Certified Company
1557-MS-GPS-1X2-Slimline-Splitter-02



Specifications

GPS 1 X 2 Slimline Splitter

OUTPUT PORTS

- » Number of ports 2

ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical)
 - Input: 1.5:1
 - Output: 1.5:1
- » Frequency 1-2 GHz
- » Loss (passive) 4dB (typical)
- » Amplified Gain
 - Normal 24dB (typical)
 - Custom 0-24dB
- » Gain flatness
 - Amplified 2dB
 - Passive 1dB
- » Noise figure 1.8dB
- » Isolation (amplified)
 - Normal 16dB min.
 - Hi isolation 30dB min.
- » DC throughput 3-12VDC
- » Operating current 14mA
- » Pass through current 200mA/per port
- » Group delay 1ns

PHYSICAL SPECIFICATIONS

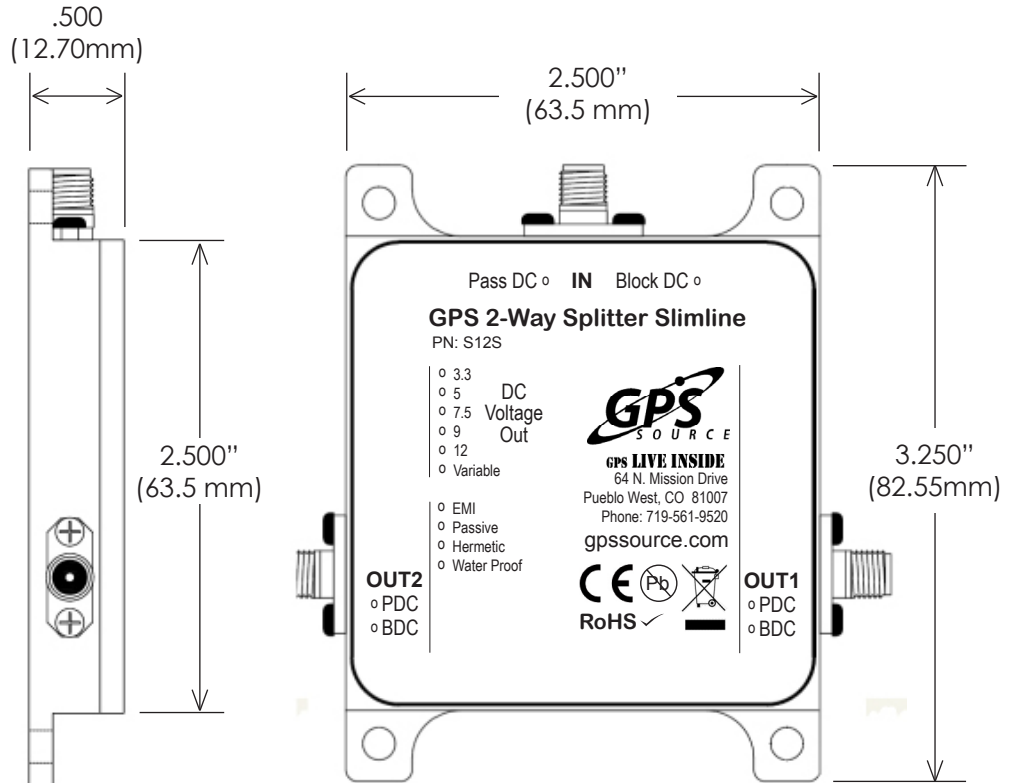
- » RF connectors SMA (m, f)
- » Weight .2 lbs (90.72 grams)
- » Operating temperature -40 to 85°C

AVAILABLE OPTIONS

- » Power Supply
 - Source Voltage
 - Any or all RF ports (input/output) can be DC blocked or can pass the powered DC voltage
 - Output Voltage
- » Other Miniature RF Connectors Avail.
- » Housing (Slimline)
- » Port - All ports pass DC
 - Custom gain by port available
- » Spike & surge protection

ORDERING INFORMATION

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



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