

## S12 – GNSS Splitter 1 in 2

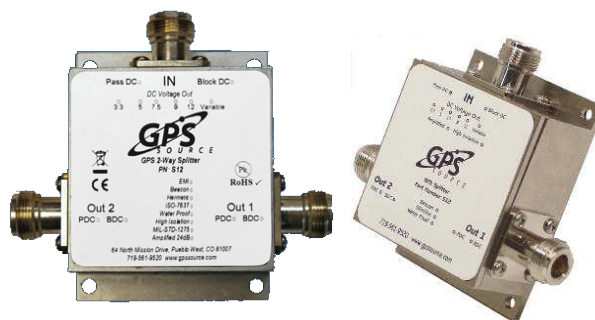
### Description:

The S12 GPS Splitter is a one-input, two-output GPS device.

This product typically finds application where an input from an active GPS roof antenna is split evenly between two receiving GPS units.

In this scenario, the S12 can be configured to pass DC from an RF output (J1) to the antenna input port in order to power an active GPS antenna on that port. The second RF output would feature a 200 Ohm DC load to simulate an antenna DC current draw for any receiver connected to that port.

The S12 splitter comes with many available options to meet your specific needs. Please contact us for further information on product options or specifications.



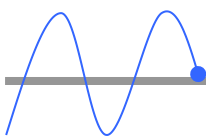
**S12**



**S12S**

### Features:

- Amplified & Passive Available
- Passes GPS L1, Galileo & GLONASS
- Excellent Gain Flatness | L1 – L2 | <1dB
- Standard or Slimline Housing



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### RF PORTS

- > Input 1
- > Output 2

### ELECTRICAL SPECIFICATION

- > Input/Output Impedance 50  $\Omega$
- > Bandwidth 1.0 – 2.0 GHz
- > Gain (active)
  - Standard 24 dB ( $\pm$  1)
  - High Isolation Option 15 dB ( $\pm$  1)
- > Attenuation (passive)
  - Typical 4.5 dB
  - Min. – Max. 4 – 5 dB
- > SWR Input / Output 2.0 : 1
- > Noise Figure (active) 1.8 dB max.
- > Gain Flatness
  - Active 1 dB max.
  - Passive 0.5 dB max.
- > Amplifier Balance (Port to Port) 0.5 dB max.
- > Phase Balance 1.0 ° max.
- > Group Delay 1 ns max.
- > Isolation (active/passive)
  - Adjacent Ports 16 dB min.
- > Isolation (High Iso. Option)
  - Adjacent Ports 30 dB min.
- > DC Input
  - External Supply 3 – 28 V DC
  - Pass DC active via J1 3 – 16 V DC
  - Pass DC passive 16 V DC max.
  - Block DC (200 Ohm load) 16 V DC max.
- > Current
  - Consumption (active w/o ant.) 7 mA max.
  - Thru Current via DC Pass 250 mA max.
  - Thru Current via ext. supply see below
- > Max. RF Input without damage
  - Active 0 dBm
  - Passive 30 dBm

### PHYSICAL SPECIFICATION

- > Operating Temperature - 40 to 85°C
- > Dimensions Standard (L x H x D) 83 x 33 x 64 mm
- Dimensions Slimline 83 x 13 x 83 mm
- > Weight Standard 275 g
- Weight Slimline 110 g

### OPTIONS

- > Power Supply
  - Input Voltage
    - Wall Transformer 110 V AC
    - Wall Transformer 230 V AC
    - Wall Transformer 240 V AC
    - Military- or Quick Connectors (5-28V DC)
  - Output Voltage
    - 3.3, 5, 7.5, 9, 12 V, variable, custom
- > RF Connectors
  - N female (only standard housing)
  - TNC female (only standard housing)
  - SMA female
- > High Isolation Option
- > DC specification (for each Port)
  - DC Pass
  - DC Block (via 200 Ohm load)

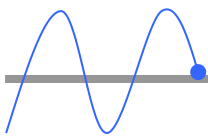
### ORDERING INFORMATION

Contact AuCon for informations regarding price/availability and test data. CoC included in shipping.

*DC IN for powered option must be 2V greater than desired DC Voltage Out. Maximum DC IN is 35V when 1275B powered option is included. Maximum combined DC current draw out all ports of the device is a function of the DC input voltage and desired DC output voltage, according to the following:*

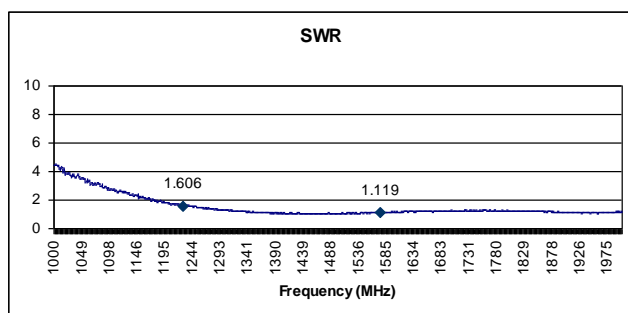
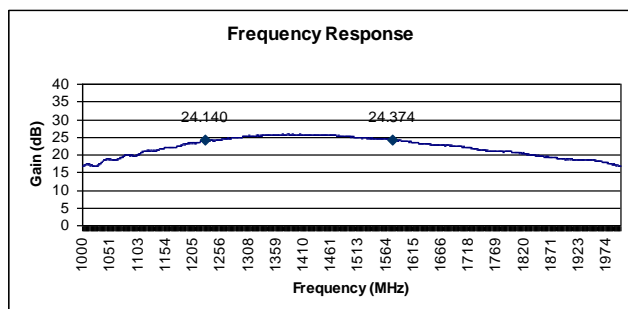
$$I_{out} \leq 1.4 / (V_{DC IN} - V_{DC OUT}) - 0.016 \text{ Amps}$$

*(For powered option with a wall Transformer, DC IN = 9V)*

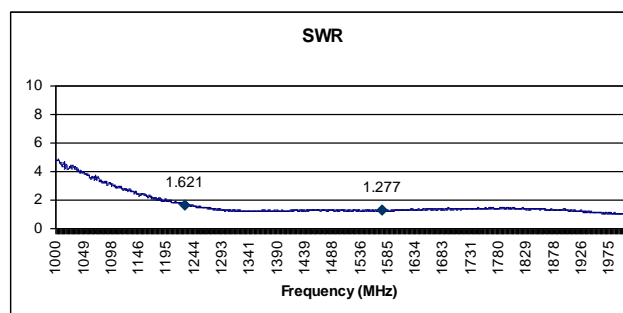
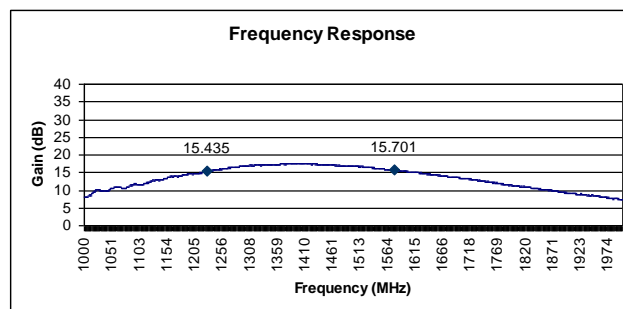


# S12 – GNSS Splitter 1 in 2 – Performance Data

## S12 Active – Normal



## S12 Active – High Isolation Option



## S12 - Passive

