

S18WI



GPS 1 X 8 Smart Splitter

KEY FEATURES

- » Will automatically switch ports if DC bias on primary port fails
- » Ability to share existing antenna with eight GPS receiver devices
- » Built in Amplification
- » High Isolation
- » Can pass GPS, Galileo & GLONASS L1/L2
- » Active Antenna Status Monitor
- » IEC 529 LVL IP55 Environmental Option

OPTIONS

- » Output DC Bias Select Option to Enable Automatic Selection of Port DC Bias Input
- » Hi Rejection L1 Filter Option Available for Severe EMI/EMC Environments
- » Surge protection available on all nine ports
- » Antenna monitor alarm
- » Durable environmental caps available for all unused ports

APPLICATIONS

- » Base Stations
- » Timing & Position Applications
- » Military Applications

GPS Source can custom design the S18WI to fit your unique application. Call us at (719) 561-9520 to discuss all options available.

INTRODUCTION

The S18WI GPS Splitter, makes it possible to use a single GPS antenna and cable for multiple synchronization devices. It's key feature is the ability to provide antenna bias redundancy. The S18WI automatically switches to another input port if the DC bias on the primary port fails.

Engineered to meet the demanding, high reliability requirements of the wireless infrastructure market, the S18WI can eliminate the cost of multiple antennas and long cable runs into a wireless base station. The S18WI provides dependable signals for eight GPS receivers and can be used with any RF coax-based antenna.

BENEFITS

- Built in redundancy reduces long term costs
- Multiple ports eliminates expense of second antenna or cable run
- Interaction between multiple GPS receivers avoided because of high isolation
- Built in amplification mitigates splitter loss, avoids use of cascading splitters/Bias Tees.
- L1 filtering prevents interference from unwanted signals and avoids receiver saturation

DESIGNED FOR DEMANDING TOWER MOUNTED ENVIRONMENT

- Reduces Costs by Eliminating Multiple GPS Antennas and Cables on the Tower
- Engineered with High Reliability and Redundancy for Demanding Wireless Infrastructure Requirements
- Hi Rejection L1 Filter Option Available for Severe EMI/EMC Environments
- Provides DC Bias Voltage from GPS Receivers to Active Antenna on the Tower
- Automatic Network Alarm if Active GPS Receive Antenna Fails
- Designed for Demanding Tower Mounted Environment (Tower Mount Environmental Housing: IEC 529, Level IP55)
- Weatherproof housing built for years of operation in an external, harsh environment
- Fully CE/R&TTE and FCC Tested and Compliant





Specifications

GPS 1 X 8 Smart Splitter

OUTPUT PORTS

- » Number of ports 8

ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical)
 - Input: 1.3:1
 - Output: 1.3:1
- » Bandwidth:
 - Filtered Option: L1 1575±15MHz
 - Non-filtered Option: L1/L2 1200 to 1600MHz
- » Gain (typical)
 - Normal 6dB
 - Custom 0-15dB
- » Gain flatness 3dB max
- » Noise figure 3dB max
- » L1 Selectivity (±50MHz) 40dB
 - Filtered Option (Ant. any output)
- » Isolation
 - Adjacent ports 35dB min.
 - Alternate ports 40dB min.
- » DC Input on any RF output 4-12VDC
- » Operating current (typical) 18mA
- » Pass through current (max) 250mA/per port
- » Group delay (amplified) <5ns
- » Amp. Balance 1.0dB max
 - (|J1-J2|, Ant. - Any Port, Unused Ports - 50Ω)
- » Phase Balance 1.0 deg
 - (Phase |J1-J2|, Ant. - Any Port, Unused Ports - 50Ω)

PHYSICAL SPECIFICATIONS

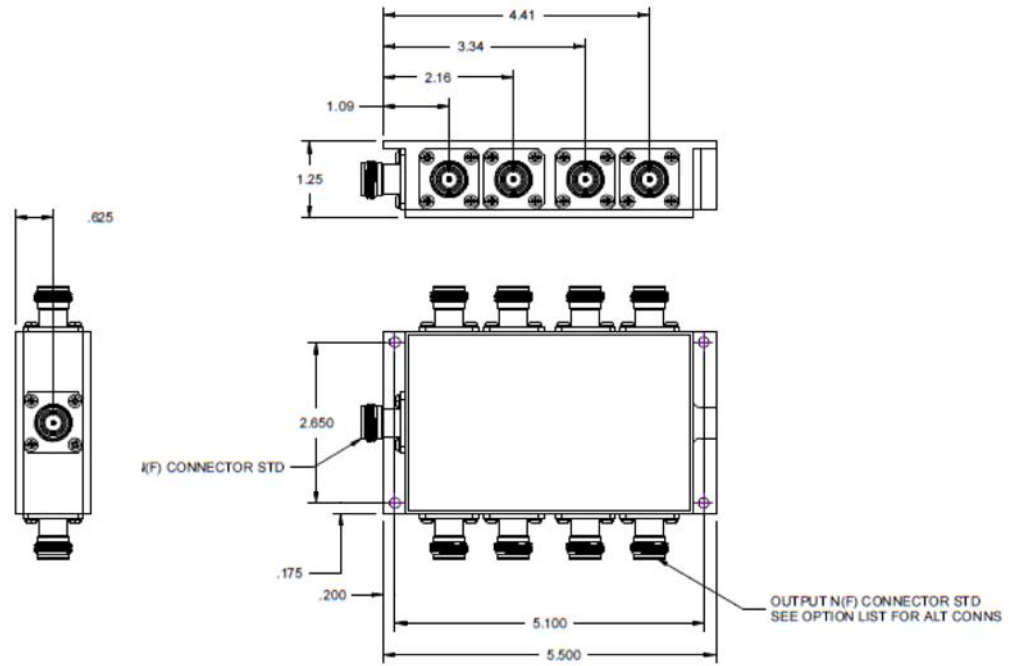
- » RF connectors
 - N (m, f)
 - SMA (m, f)
 - TNC (m, f)
 - 7/16 DIN (f)
 - BNC (m, f)
- » Weight 1.2 lbs max.
- » Operating temperature -40°C to 85°C

AVAILABLE OPTIONS

- » RF Connectors
- » Port - Custom gain by port available
- » Spike & surge protection

ORDERING INFORMATION

Contact GPS Source for pricing/availability
 Performance data available online
 1 x 8 S18WI GPS Splitter



GPS Source, Inc.
 64 N. Mission Drive
 Pueblo, West, CO 81007
 T: 719.561.9520
 F: 719.565.0890
 sales@gpssource.com
 www.GPSSource.com