

GPS Antenna Splitter with Redundancy Switch

Reduce Antennas While Still Providing Redundancy...

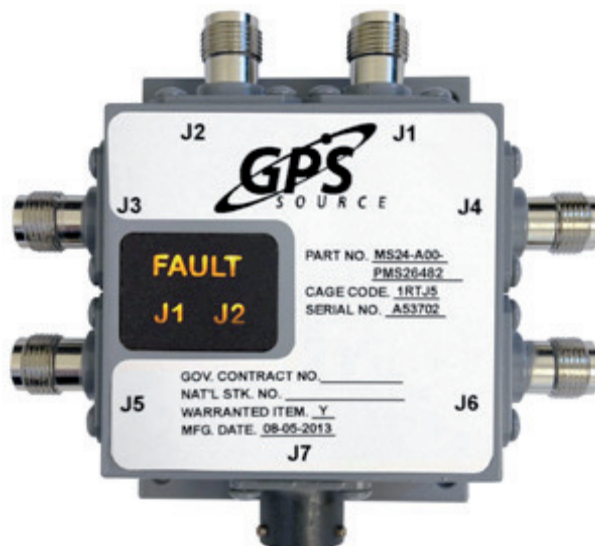
The MS24 can reduce the number of antennas required, while providing 100% redundancy to all GPS systems. It is a GPS splitter with the ability to automatically switchover from a primary GPS antenna to a secondary GPS antenna if there is an antenna failure. Built-in redundancy enables all connected GPS receiver devices to remain fully functional in the event of either antennas failing. The MS24 can also be used on vehicles, aircraft, boats and submarines where signal blocking requires switching between antennas.

The MS24 has an internal sensor that monitors the health of two GPS receive antennas that are connected to it (primary and secondary). If the primary antenna becomes suspect, the splitter will seamlessly switch to the secondary antenna. An electronic switch inside the splitter has been engineered so that it can be remotely controlled. This remote control can override the internal sensor.

An optional LED fault indicator gives the ability to visually determine the health of either GPS receive antennas.

Features

- Embedded Antenna Health Sensor
- Automatic Internal Antenna Port Switch
- Remote Antenna Port Switching Capability
- Optional LED - Easy to recognize which antenna is operational
- Two inputs, four outputs
- Passes L1/L2/L5 GPS, GLONASS L1/L2/L3, GALILEO E1/E5/E6/L6, Compass B1/B2/B3
- Custom Gain
- Amplified & Passive Versions Available

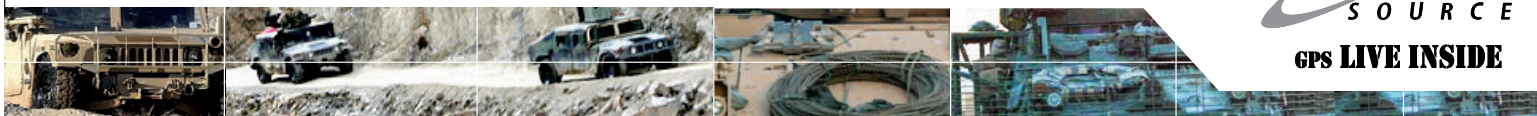


MS24

Simplify Design Requirements for Redundancy & Reduce Complexity

- Simple design reduces system complexity, hardware and implementation outlays
- Highly reliable device that is waterproof and EMI sealed
- Built for extreme mission environments
- Engineered for easy installation and configuration
- Built to military standards

MIL Standards		
MIL-STD-810G	MIL-STD-704	MIL-STD-1587
MIL-STD-1472	MIL-E-5400	MIL-STD-461F
MIL-STD-202	MIL-HDBK-454	MIL-STD-1275B
MIL-STD-883	MIL-DTL-26482	



OUTPUT PORTS

- » Number of ports 4

ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical)
 - Input: 2.0:1 max
 - Output: 2.0:1 max
- » Bandwidth
 - L Band 1 - 1.7 GHz
- » Amplified Gain (typical)
 - Normal 8 dB
 - Custom 0-8 dB
- » Gain flatness
 - Amplified 2 dB
 - Passive 1 dB
- » Noise figure
 - Amplified 4.3 dB
- » Isolation
 - Amp/Pass (Norm, Gain = 8dB)
 - Opposite Ports 20 dB min.
 - Adjacent Ports 12 dB min.
 - Amp/Pass (Hi Iso, Gain=0dB)
 - Opposite Ports 38 dB min.
 - Adjacent Ports 28 dB min.
- » DC input level DC 16-32VDC
- » DC output level 3-12VDC
(Voltage to antenna port (J1) or (J2) may be specified)
- » Operating current 30mA max.
- » Antenna / Thru Current
 - Powered, Mil. Conn. 65 mA
 - Pass DC (non-powered) 250mA
- » Group delay 1ns

PHYSICAL SPECIFICATIONS

- » RF connectors
 - N (m, f)
 - SMA (m, f)
 - TNC (m, f)
- » Weight .75 lbs/340.2 grams max.
- » Operating temperature -40 to 85°C

ANTENNA STATUS MONITORING & CONTROL

Antenna status and control available via signals conveyed through DC Connector (MIL-DTL-26482). Default antenna status signal will be HIGH if primary antenna (J1) is selected and LOW if secondary antenna (J2) is selected (on PIN D).

Antenna Control (PIN C)

- » V_{LOW} 1 V max
- » V_{HIGH} 12 V max.

Antenna Status (PIN D)

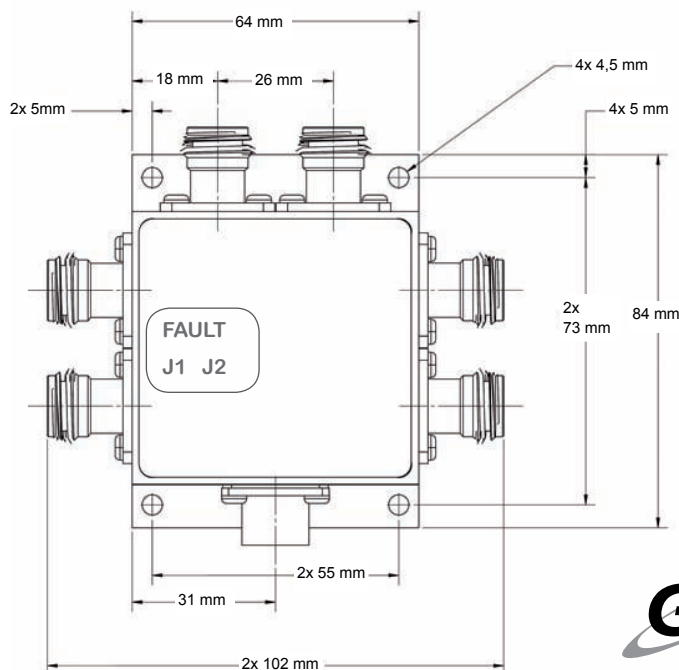
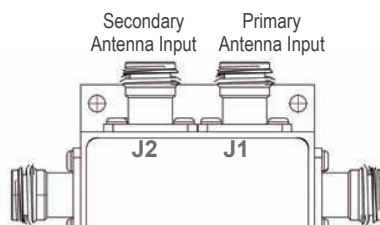
- » V_{LOW} .5 VDC max
 - » V_{HIGH} 12 VDC max.*
 - » I_{SINK} 10 mA max.
- (*Selected DC Output Level)

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
- » RF Connectors
- » Port - All ports can pass DC
 - Custom gain by port available
- » LED Fault Indicator

ORDERING INFORMATION

Contact Aucon for pricing/availability
2 x 4 GPS Splitter with Redundancy Switch



AS9100 & ISO 9001:2008 Certified
Veteran Owned Small Business
CCR Registered
CAGE: 1RTJ5
DUNS: 883995677
NAICS: 334220, 334290, 334511, 541330, 541690