



StingRay S-band Active Splitter and Redundancy Switch

SRY-G2S-DS6-401-xxxxxx is a hot swap active splitter with 10MHz & DC pass between the output and common ports. The module provides 0 dB gain with an input impedance of 50 or 75 Ohms, the output is always 50 Ohms. The module is designed to be used with 50 Ohm transmit modules from the StingRay series to produce 1+1 redundant systems. The module is designed to work in Genus 2U chassis and ODUs.

SRY-G2S-SS6-402-xxxxxx is a hot swap, redundancy switch operating over -5 to -55dBm mean power. The module incorporates RF detection at each of its input ports and switches over if the level differs by more than 2 to 30dB, customer settable. It is designed to operate with optical receivers from the StingRay Genus chassis series.

Typical applications:

- Ku-band and Ka-band ready for HTS applications
- Distribution of comms traffic across site with minimal loss
- General satcoms– teleports, video head-ends, TVRO
- Compact solution for small quantity links such as tactical HQ
- A resilient solution for satellite teleports with transition distances up to 10km

Resilience from dual redundant hot-swap power supplies & field replaceable CPU & HMI

Local control & monitoring via HMI high resolution touchscreen

Compact housed in a 2U high chassis with capacity for up to 17 modules

Variable voltage 13/18VDC, 22 kHz tone up to 500mA to LNBS

Hot Swap & replaceable modules

Field replaceable Internal 10MHz reference source and external reference inject port with auto detection (optional)

Remote control & monitoring via RJ45 Ethernet port with SNMP & web browser interface

Chassis - Specification

Dimensions / Weight / Colour	2U high x 510mm deep x 19" wide / <10 kg / RAL9003—White (Semi-matte)
Capacity	Total of 17 module slots. Note that 1 slot may be used for fan (if required) and 1 slot may be used for 10 MHz EXT inject module (if required). Note actual modules may require >1 slot. Refer to required module spec table.
Temperature	Operating: 0°C to +45°C / Storage: -20°C to +75°C
Location / Humidity / Altitude	Indoor use only / 20 to 90% non-condensing / 10,000 feet AMSL (Operational) 30,000 feet AMSL (Storage) Above Mean Sea Level
Control & Monitoring	Local: HMI touch screen Remote: Ethernet via RJ45, 10BaseT/100 BaseTx. TCP/IP, SNMP V3 & HTTPS & Web browser interface HMI and CPU field replaceable. Each module independently monitored and reported.
MTTR	20 minutes (15 minutes to retrieve spare part and 5 mins to replace) Applies to LRUs only and assumed in house stock
AC Input / Consumption	85-264Vac 50/60Hz / 150W
PSU Redundancy	Dual redundant and alarmed Diode OR. Hot swappable
Input & Output ports	Dependant upon module fitted



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**Model Number: SRY-G2S-DS6-401 &
SRY-G2S-SS6-402**

Preliminary Technical Specifications and Operating Parameters

RF Parameters (Splitter and Switch Modules)

Model Number	SRY-G2S-DS6-401		SRY-G2S-SS6-402	
Frequency Range	500 To 3150 MHz (Extended L-band)			
Gain	0 dB \pm 1.5 dB		0 dB \pm 1.5 dB (TBC)	
Flatness	850-2150MHz	\pm 1.0 dB	\pm 1.0 dB	
	500-3150MHz	\pm 1.5 dB	\pm 2.0 dB	
	Any 36MHz	\pm 0.25 dB	\pm 0.25 dB	
Return Loss <small>(All RF ports are DC blocked)</small>	50 ohm SMA	18 dB typical, 12 dB minimum	18 dB typical, 12 dB minimum	
	50 ohm BNC	18 dB typical, 12 dB minimum	18 dB typical, 10 dB minimum	
	75 ohm BNC	16 dB typical, 10 dB minimum	16 dB typical, 8 dB minimum	
	75 ohm F-type	16 dB typical, 10 dB minimum	16 dB typical, 8 dB minimum	
Isolation	20 dB		-40 dB (-10dBm tone across operational bandwidth unselected input to output)	
1dB Gain Compression Point	+5 dBm minimum (output power)		+7 dBm minimum (output power)	
OIP3	-		+18 dBm minimum	
Noise Figure	12 dB maximum		12 dB maximum	
Group Delay Variation	2ns over full band, 1ns over any 36MHz			
RF Input Signal Range	-		-55 to -5 dBm (total power)	
Max RF Input	20 dBm total power (Damage level, NOT operational)		16 dBm total power (Damage level, NOT operational)	
Switching Threshold	-		2 dB to 30 dB Differential (Customer Settable)	
Switching Delay	-		0 to 10 Seconds (Customer Settable)	
10MHz level at output	10MHz Ref Bypass , 0dB loss		-10 dBm to + 10 dBm	
DC Pass	Yes		DC Blocked	

Non RF Parameters

Power Consumption	<3W			
Module Swap	Hot Swap			

Control, Monitoring & Alarms

Temperature	Each module monitored			
Monitoring Includes	Status of amplifier stage, supply voltage, temperature			
Control	Local and Remote via parent chassis			

Environmental Conditions

Operating Temperature	-20°C to +60°C			
Storage Temperature	-40°C to +90°C			
Location	Indoor use (ODU options available)			
Humidity	20 to 90% non-condensing			
Altitude	10,000ft AMSL			
Mass	0.35kg typical TBC			
Size	TBC			
Spec Issue	0.2		0.2	

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.
 Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.



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