



10MHz Active Redundancy Switch

SWF-G2S-Y-124-xxxxxx is a hot swap, redundancy switch operating over -10 to +10dBm 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 10dB, customer settable. It can be used to operate with optical receivers from the StingRay Genus chassis series.

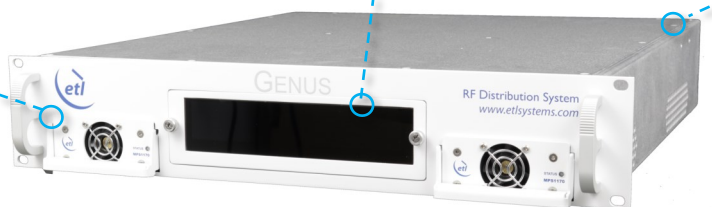
Typical applications:

- 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

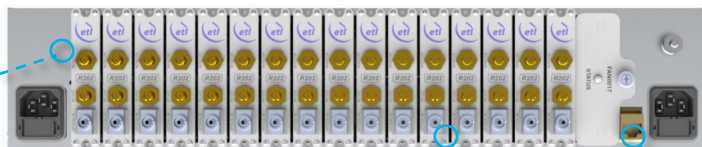
Resilience from dual redundant hot-swap power supplies & field replaceable CPU & HMI

Local control & monitoring via HMI high resolution touchscreen

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



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 550mm 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





Preliminary Technical Specifications and Operating Parameters

RF Parameters		
Model Number	SWF-G2S-Y-124	
Frequency Range	10MHz	
Gain	0 dB \pm 1.5 dB	
Return Loss	21 dB typical, 18 dB minimum	
50 ohm SMA (All RF ports are DC blocked)		
Isolation	60 dB minimum (0dBm tone across operational bandwidth unselected input to output)	
1dB Gain Compression Point	+12 dBm minimum (output power)	
OIP3	+24 dBm minimum	
Noise Figure	18dB typical, 20 dB maximum	
RF Signal Range	Output: -70dBm to -10dBm (total power) o/p range available under all i/p conditions. (Note that all Specifications are only 'typical' between -60 & -70dBm unless otherwise detailed).	
Max RF Input	16 dBm total power (Damage level, NOT operational)	
Switching Threshold	2 dB to 10 dB Differential (Customer Settable)	
Switching Delay	0 to 10 Seconds (Customer Settable)	
DC Pass	DC Blocked	
Phase Noise	1 Hz	<-128dBc/Hz
	10 Hz	<-141dBc/Hz
	100 Hz	<-152dBc/Hz
	1 kHz	<-159dBc/Hz
	10 kHz	<-162dBc/Hz
	100 kHz	<-163dBc/Hz
	1 MHz	<-163dBc/Hz
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	0.4kg typical	
Size	19mm Width x 87mm Height x 225mm Depth	
Spec Issue	0.1	

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.

