



Swift Series DC-40 GHz 2+1 Redundancy Switch Module with standby for Frequency Converters

Typical applications:

- Teleports & Earth Stations
- Satellite Operations
- Government & Defence applications
- Telemetry, Tracking & Command
- High Resilience applications

The swift switch 2+1 redundancy module is for use in the 1U Genus chassis, specifically for Falcon frequency converter configurations. In 2+1 redundancy configuration, the chassis has capacity for up to three hot-swap frequency converter modules and 1 redundancy switch module.

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

Local control & monitoring via HMI high resolution touchscreen

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

Compact housed in a 1U high chassis with capacity for 1 redundancy switch and 3 converter modules

Flexible Module Configurations including interchangeable frequency range options. User selectable via HMI or web browser

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

Redundancy configurations 2+1 redundant configuration

Hot Swap & replaceable RF Frequency Converter & redundancy switch modules

GENUS Chassis - Specification

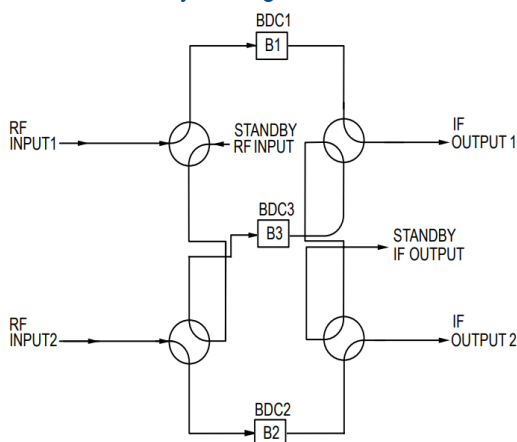
Dimensions / Weight / Colour	1U high x 550mm deep x 19" wide / <10 kg / RAL9003—White (Semi-matte)
Capacity	17 module slots. 1 slot used for fan. (If Required) and 1 slot used for 10 MHz EXT inject module.
Temperature	Operating: 0 to 45°C / Storage: -20°C to +75°C
Location / Humidity / Altitude	Indoor 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
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
No. of switch modules per chassis	Dependant upon configuration.



Swift Redundancy Switch Module
Compact form factor allowing multiple modules to be housed in 1U chassis. Each module uses 6 slots in the chassis.

Swift Redundancy Switch Module - RF Parameters		
Model Numbers	SWF-G1S-QX-106	
Size	6 slots wide.	
Configurations	1 redundancy switch & 3 converter modules.	
Redundancy	2+1	
Frequency Range	Input / Output	DC to 40 GHz
	Output / Input	DC to 6 GHz
Insertion Loss (40 GHz Path)	≤ 2.5 GHz	≤ 2.0 dB
	≤ 12.75 GHz	≤ 2.5 dB
	≤ 31.0 GHz	≤ 3.5 dB
Insertion Loss (6 GHz Path)	≤ 2.5 GHz	≤ 2.5 dB
	≤ 6 GHz	≤ 3.0 dB
Insertion Loss Variation (Max)	± 0.50 dB	
Gain Flatness (Input/Output Path)	0.85—2.15 GHz	± 0.75 dB
	10.70—12.75 GHz	± 1.0 dB
	29.25—31.00 GHz	± 1.5 dB
Return Loss (Input/Output Path)	0.85—2.15 GHz	-18 dB
	10.7—12.75 GHz	-14 dB
	29.25—31.00 GHz	-12 dB
Isolation (path to path)	55 dB min	
Input Power Range	≤ +35 dBm	
Spurs In-band	Non-carrier related	< -85 dBm

2+1 Redundancy Configuration



Specs are for standalone modules. There may be slight variation when used for frequency converter redundancy configurations

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.