ETL Systems

Excelling in RF Engineering

Model Number:
SWF-G1S-K1-203

Swift Series DC—18 GHz SPDT Switch Module

The swift switch SPDT module is for use in the 1U Genus chassis. The chassis has capacity for up to eight hot-swap switch modules. RF coax reflective switch, DC to 18GHz, no RF detection or monitoring.

Typical applications:

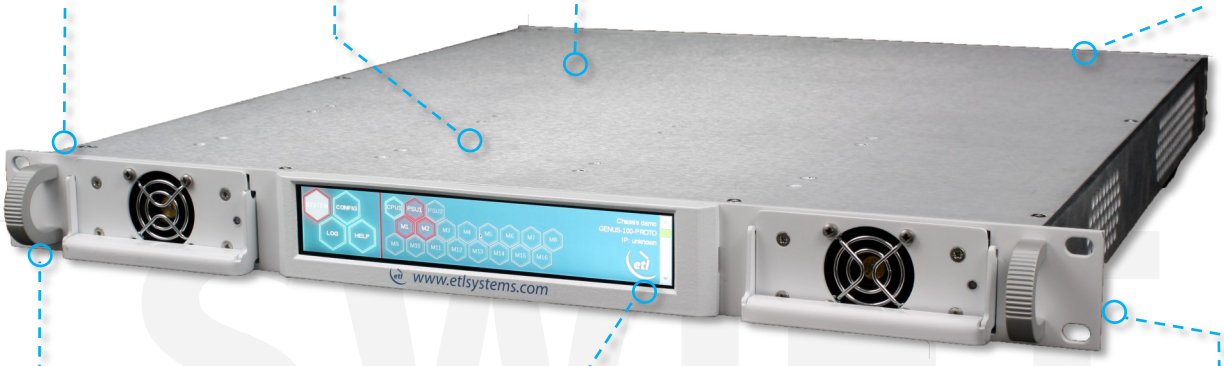
- Teleports & Earth Stations
- Satellite Operations
- Government & Defence applications
- Telemetry, Tracking & Command
- High Resilience applications

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

Local control & monitoring via HMI high resolution touchscreen

DC-18GHz operating frequency range

Compact housed in a 1U high chassis with capacity for 8 transfer switches.



Flexible Module Configurations User selectable via HMI or web browser

Hot Swap & replaceable RF Switch modules. Up to 8 RF modules housed in a 1U chassis

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

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 (if required).
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
Modules per chassis	Dependant upon configuration

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Swift SPDT Switch Module
Compact form factor allowing multiple modules to be housed in 1U chassis.
Each module uses 2 slots in the chassis.

Preliminary Specifications

Swift Redundancy Switch Module - RF Parameters				
Model Numbers	SWF-G1S-K1-203			
Capacity	1x2 (SPDT)			
Impedance	50 Ohm (Reflective port behaviour when not switched)			
Switchover Time (Maximum)	15ms			
Switch Life (Minimum per position)	10,000,000 Cycles			
Switch Action	Break before make			
Connector Type	SMA			
Frequency Bands	DC - 3 GHz	3 - 8 GHz	8 - 12.4 GHz	12.4 - 18 GHz
Insertion Loss (Maximum)	0.2dB	0.3dB	0.4dB	0.5dB
Return Loss (Minimum)	20dB	17dB	15dB	13dB
Isolation (Minimum)	80dB	70dB	60dB	60dB
Maximum Input Power (Maximum average through switched path)	75W	50W	40W	30W
Chassis Slots Used	2 slots			
Environmental Conditions				
Operating Temperatures	0 to 50°C			
Storage Temperatures	-20°C to +75°C			
Location	Indoor Use Only			
Humidity	20 to 90% non-condensing			
Altitude	10,000ft/3000m AMSL (Above Mean Sea Level)			
Physical Dimensions & Parameters				
Dimensions	250mm x 42mm x 42mm			
Module Finish	Machined Aluminium			
Spec Version	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.

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