GENUS 1U Redundant Chassis

The GENUS chassis has a modular design which can house any combination of compatible modules within the unit. Supplying operators with a flexible and scalable solution, that reduces spare parts and rack space requirements.

The 1U chassis houses up to 17 RF modules including Amplifiers, BUC/LNB Power Supplies, Frequency Converters, Matrices, RF over Fibre, Redundancy Switches and Test Loop Translators, which can be mixed. Providing a compact 1U system that is smaller in comparison with traditional 19” solutions, which could require 2U, 3U, 4U or more to achieve the same functionality. The GENUS chassis provides a cost-efficient solution with field-replaceable components.

The RF modules are field-serviceable and can be inserted whilst the shelf is in service, giving excellent levels of flexibility and resilience. With additional reliability from dual redundant hot-swap power supplies & field serviceable RF modules, HMI, CPU and optional user replaceable internal and external 10MHz reference source.

Compact & flexible

1U chassis holding up to 17 RF modules, which can be mixed.

Secure communications

with SNMPv3, HTTPS

Local control & monitoring

via front panel capacitive HMI touchscreen.

Resilience

from dual redundant hot-swap power supplies & field serviceable RF modules, HMI & CPU

10MHz reference source

User replaceable internal 10MHz reference & distribution module. External 10MHz input card also available.

Flexible signal distribution

Frequency converters, redundancy switches, RF over fibre, matrices, line amplifiers, splitters/combiners and LNB powering modules are available.

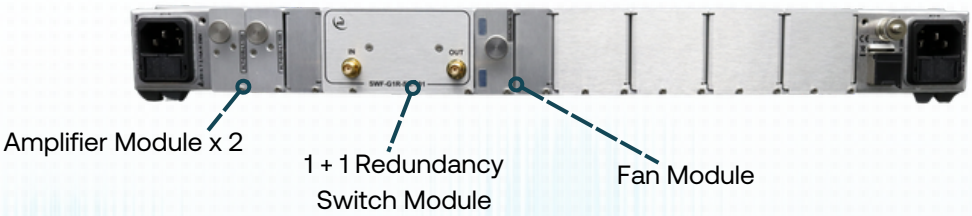
Remote control & monitoring

via RJ45 Ethernet via RJ45, 10BaseT/100BaseTx, ETL TCP/IP protocol, SNMPv3 & Web Browser Interface

General Specifications		
Capacity		Up to 17 modules **Note:** actual number dependent on module type fitted
Dimensions		1U high x 550mm deep x 19" wide
Weight		<10 kg
Colour		RAL9003 White (Semi-Matte)
AC Power		85-264V AC (50/60Hz)
AC Consumption		275W Max. consumption at steady rate
PSU		Dual redundant & alarmed, Diode OR, Hot-swap
RF Modules		Single, field replaceable
Reliability		
MTTR		20 minutes 15 minutes to retrieve spare part and 5 mins to replace. Applies to LRUs only and assumed in house stock.
MTBF	Chassis	>250,000
	CPU	>250,000
Field-serviceable Components		RF modules, CPU & HMI, [optional] internal & external 10MHz reference source.
Hot-swap Components		Dual redundant power supplies
Control & Monitoring		
Local Control		HMI, capacitive touchscreen
Remote Control & Monitoring		Ethernet via RJ45, 10BaseT/100BaseTx ETL TCP/IP protocol SNMPv3 & HTTPS Built-in Web Server
Environmental		
Operating Temperature		0 to 45˚C
Storage Temperature		-20˚C to +75˚C Not Powered
Location/Humidity		Indoor use only — 20 to 90% non-condensing
Altitude	Operational	10,000 ft AMSL (Above Mean Sea Level)
	Storage	30,000 ft AMSL (Above Mean Sea Level)

A sample of available RF modules						
Amplifier	BUC/LNB Power Supply	Frequency Converter	Matrices	Redundancy Switch	RF Over Fibre	Test Loop Translator (TLT)

Example multi-module configuration



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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