



Genus 1U Chassis

Flexible & resilient RF signal management

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 Supply's, 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.

Typical applications:

- Teleports, ground stations, maritime high resilience applications and unmanned sites.
- High resilience RF distribution where single points of failure can be minimised.
- Redundancy applications for remote satellite teleports.
- V/HTS gateways
- Signal distribution – Amplifiers, BUC/LNB Power Supply's, Frequency Converters, Matrices, RF over Fibre, Redundancy Switches, Test Loop Translators are available.



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



Local control & monitoring via front panel capacitive HMI touchscreen.



10MHz reference source Optional user replaceable internal and external 10MHz reference & distribution source. (refer to separate datasheet)



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



Secure Communications with SNMPv3, HTTPS



Flexible Signal Distribution Frequency converters, Redundancy Switches (N+1), RF Over Fibre, Matrices and Power Supply Modules are available.



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





Technical specifications and operating parameters

General Specifications	
Capacity	Up to 17 RF modules Note: Actual number dependent upon 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	150W Max. consumption at steady state
PSU	Dual redundant & alarmed, Diode OR, Hot-swap
RF Modules	Single, field replaceable

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	
Location	Indoor use only	
Storage temperature	-20°C to +75°C Not Powered	
Humidity	20% - 90% non-condensing Relative Humidity	
Altitude	Operational	10,000 ft AMSL (Above Mean Sea Level)
	Storage	30,000 ft AMSL (Above Mean Sea Level)

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.

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	

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

Custom RF modules may be available - If you have a requirement which isn't listed in the RF module options table please contact us.

Example of multiple module configuration

For modules technical specifications, refer to product specific datasheet

