

GENUS Outdoor Unit

Flexible & resilient RF signal management

The GENUS outdoor unit (ODU) 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 space requirements.

The ODU chassis houses up to 19 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. 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, CPU and optional user replaceable internal and external 10MHz reference source & HMI.

Available with the additional option of air-conditioning units for higher operating temperature environments. (Model GNS-301-ODU-A) and with heating for lower temperature operation (Model GNS-301-ODU-H). See Air Conditioning/Heating Model Numbers

Compact & flexible

ODU chassis holding up to 19 RF modules, which can be mixed.



Flexible signal distribution

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

Secure Communications

with SNMPv3, HTTPS



Remote control & monitoring

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

Resilience

from dual redundant hot-swap power supplies & field serviceable RF modules & CPU. Optional Air Conditioning units for higher operating temperature. Optional hot swap HMI



General Specifications		
Capacity	Up to 19 RF modules Note: Actual number dependent upon module type fitted. (Can accommodate FALCON 4-slot modules in 2+1 configuration, please enquire if required).	
Dimensions	500mm high x 500mm wide x 300mm (TBC for AC option) deep Please confirm size requirements with ETL prior to order	
Weight	<18 kg (TBC)	
Colour	RAL9003 White (Semi-Matte)	
AC Power	100-240 VAC (50/60Hz) 'A' aircon option is 220-240 VAC only 'A1' aircon option is 100-120 VAC only	
AC Consumption	TBC	
PSU	Dual redundant & alarmed, Diode OR, Hot-swap	
RF Modules	Single, field replaceable & hot-swap	
Heat Load	<145W, 495 BTU/Hour (for GNS-301-ODU-A)	
Tech Spec Version	1.0	
Reliability		
MTTR	15 minutes to replace. Assumes spares at hand. Applies to LRUs only and assumed in house stock.	
MTBF	Chassis	> 250 000
	CPU	> 250 000
Hot-swap / Field-serviceable Components	Dual redundant power supplies, RF modules, CPU, internal 10MHz reference source & HMI (if fitted)	
Control & Monitoring		
Local Control	HMI, capacitive touchscreen (option)	
Remote Control & Monitoring	Ethernet via RJ45, 10BaseT/100BaseTx ETL TCP/IP protocol SNMPv3 & HTTPS Built-in Web Server	
Environmental		
Operating temperature	-20°C to 45°C	
	-40°C to +65°C with optional Air-Conditioning units -40°C requires optional heat pad Please see Air Conditioning/Heating Model Numbers for options	
Storage temperature	Outdoor or Indoor use IP65 AC unit reduces IP rating to IP54	
Location	-40°C to +80°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)



Air Conditioning/Heating Model Numbers			
Model Number	Option	Operating Temperature	Comments
GNS-301-ODU	ODU no Air-conditioning or heater	-20°C to +45°C	-
GNS-301-ODU-H	ODU fitted with Heater	-40°C to +45°C	-
GNS-301-ODU-A	ODU fitted with Air Conditioning	-20°C to +65°C	Max air ambient 55°C, spot temperature up to 65°C
GNS-301-ODU-AH	ODU fitted with Air Conditioning and Heater	-40°C to +65°C	

RF Module Options						
Amplifier	BUC/LNB Power Supply	Frequency Converter	Matrices	Redundancy Switch	RF Over Fibre	Test Loop Translator (TLT)

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.