



StingRay RF Over Fibre Genus Modules

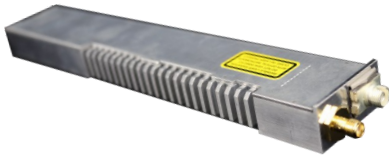
10MHz modules with ultra low phase noise and 10km nominal range

Typical applications:

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

StingRay 10MHz Transmit and Receive RF Over Fibre Genus Modules to fit Genus 1U chassis. With ultra low phase noise and 10km nominal range.

Fibre Module



Fibre Module

Compact form factor allowing multiple modules to be housed in the Genus chassis. Each module occupies 1 slot in the chassis.



TX & RX module options to transmit and receive signals up to 10 km



Hot Swap & replaceable RF module



High isolation between modules for signal quality



10 MHz operating frequency

Chassis Options



Local control & monitoring via HMI high resolution touchscreen



Flexible Module Configurations choose from a mixture of fibre modules with different operating frequencies.



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



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



Compact indoor & outdoor chassis options, which can be part populated



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



Secure protocols with SNMPv3 and HTTPS



Indoor Chassis



Outdoor Unit





StingRay TX & RX Module - RF Parameters		
Model Numbers	SRY-G1S-TY-163-xxxx	SRY-G1S-RY-164-xxxx
Frequency Range	10 MHz	
Input ports	50Ω SMA, BNC. 75Ω not available.	
Connectors & impedances	50Ω SMA	50Ω BNC
Input return loss (dB)	Typ. 20dB. Min 15 dB	N/A
Output return loss (dB)	N/A	Typ. 16dB. Min 12 dB
Input AGC level Max (dBm)	+12 dBm. Levels total power including noise	
Input AGC level Min (dBm)	0 dBm Min I/P for max O/P	
Output AGC level Max (dBm)	+12 dBm. Levels total power including noise	
Output AGC level Min (dBm)	0. dBm	
Max Input RF Power (dBm)	+16 dBm. Damage level	
Frequency Offset (Hz)	Phase Noise Typ (dBc/Hz)	Phase Noise Max (dBc/Hz)
0.1	-120	-110
1	-132	-120
10	-144	-130
100	-149	-140
1000	-150	-145
10000	-151	-147
100000	-152	-147
1000000	-152	-147
Laser Type	DFB	-
Optical Wavelength	1310 ± 10 nm	1100 to 1650nm. Optimized for 1310nm and 1550 nm
Optical Power output/input	Output: 5.5 ±2 dBm.	0 to 7dBm. Max 10 dBm
Optical Connectors	FC/APC , SC/APC Single mode fibre.	
Gain Setting Modes	Manual Gain Control (MGC) Automatic Gain Control (AGC) Fixed Gain (FG)	
Module Dimensions	19x38x253mm. 0.2kg. Genus 1U series mountable.	
Module Swap	Hot swap	
Spec Version	1.0	1.0

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.