

# 10MHz GENUS StingRay RF over Fibre module

With ultra low phase noise and 10km nominal range.

StingRay 10MHz Transmit and Receive RF Over Fibre Genus Modules to fit Genus 1U chassis.

## Module

**Tx & Rx**  
module options for transmit and receive chains up to 10km

**Compact**  
Each module occupies 1 slot in GENUS chassis

**10 MHz**  
Operating frequency range

**High Isolation**  
between modules for signal quality

## Chassis

**Resilience**  
Dual redundant hot swap power supplies; field replaceable CPU and HMI

**Local Control & Monitoring**  
Front panel capacitive HMI touchscreen

**Secure Protocols**  
with SNMPv3 and HTTPS

**Compact**  
1U indoor and compact ODU chassis options available

**Configurable**  
Choose from a mixture of fibre modules with different operating frequencies, or house alongside other RF functions

**10MHz Reference**  
Optional field-replaceable internal 10MHz reference and external reference inject port with auto detection

**Remote Control & Monitoring**  
via RJ45 Ethernet port with SNMP and web browser interface



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	19mm x 38mm x 253mm. 0.2kg. Genus 1U series mountable.	
Module Swap	Hot swap	
Spec Version	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.