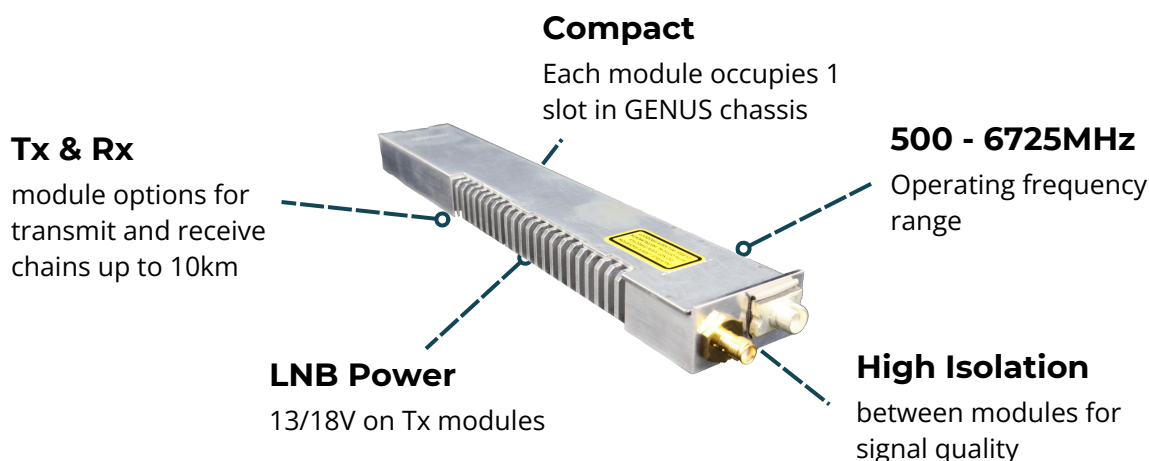


C-Band GENUS StingRay RF over Fibre module

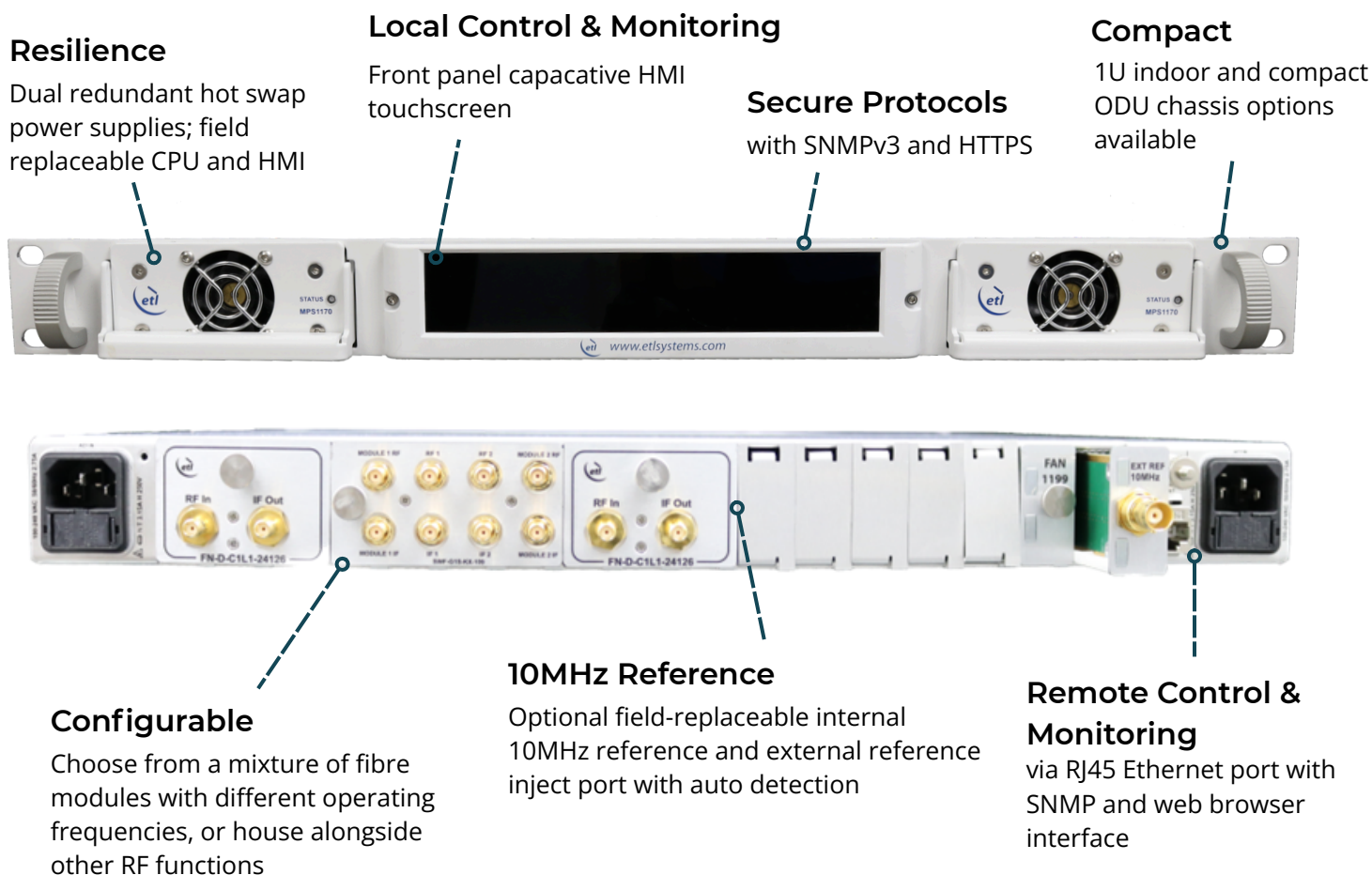
with 22KHz tone and 13V/18V LNB power

StingRay C-band Transmit and Receive RF Over Fibre modules to fit GENUS 1U or ODU chassis. The transmit module can provide LNB power 13/18VDC, 22kHz tone up to 500 mA. When installed in a 10MHz distributing chassis, the TX module can inject a user-settable and switchable 10MHz tone of between -10 and +10 dBm.

Module



Chassis



RF Parameters		
Model Numbers		SRY-G1S-TCX-167-XXXX SRY-G1S-RCX-168-XXXX
Flatness (dB) (Full TX &RX link with 10km fibre link, Fixed gain mode, input -10 dBm, output -10 dBm)	850 - 2150MHz	±1.5
	500 - 3150MHz	±2.0
	3150 - 6725MHz	±3.0
	3400 - 4200MHz	±1.5
	5725 - 6725MHz	±2.0
	Any 36MHz	±0.25 (500 to 3150 MHz) ±0.30 (3150 to 6725 MHz)
Return Loss (db)	500 - 3150MHz	18 typical, 14 minimum
	3150 - 6725MHz	14 typical, 10 minimum
Gain Setting Modes		Manual Gain Control (MGC), Automatic Gain Control (AGC), Fixed Gain (FG)
Manual Gain Range		60 dB (in 0.5 dB steps)
OIP3 Test condition: 1m fibre, 10dB gain, -22dBm tone levels	500 - 3150MHz	20 dBm typical, 17 dBm worst case
	3150 - 6725MHz	15 dBm typical, 12 dBm worst case
CNR (in any 36MHz) Test condition: 1m fibre, -10dBm RF i/p power, -10dBm RF o/p total power	500 - 3150MHz	-50 dB typical, -45 dB worst case
	3150 - 6725MHz	-45 dB typical, -40 dB worst case
Noise Figure Test condition: 1m fibre, -50dBm RF i/p power, -10dBm o/p power	500 - 3150MHz	9 dB typical, 12 dB worst case
	3150 - 6725MHz	11 dB typical, 14 dB worst case
Group Delay Variation	500 - 3150MHz	2ns over full band 1.5ns over any 36MHz
	3150 - 6725MHz	3ns over full band 1.5ns over any 36MHz
SFDR Test condition: 1m fibre, 10dB gain, -22dBm tone levels	500 - 3150MHz	107 dB/Hz ^{2/3} typical 102 dB/Hz ^{2/3} minimum
	3150 - 6725MHz	100 dB/Hz ^{2/3} typical 95 dB/Hz ^{2/3} minimum
RF Signal Range		-60 to -10dBm (total power) Operational range
Max RF Input		16dBm total power. Damage level, NOT operational.
10MHz Level at Output		-10 to +10 dBm, user settable via the chassis. Accuracy ±2.0 dB.
10MHz Isolation		-40 dB, between adjacent modules in same chassis.

RF Parameters		
Model Numbers	SRY-G1S-TCX-167-XXXX	SRY-G1S-RCX-168-XXXX
Laser Type	DFB	-
Optical Wavelength	1310 ± 10 nm	1100 to 1650nm. (Optimised for 1310nm and 1550nm)
Optical Power	Output: 4.5 ±2.5 dBm (3.8 dBm typical)	Input: 0 to 4.5dBm (10 dBm max.)
Optical Connectors	FC/APC , SC/APC Single mode fibre. Use angle polish connectors only.	
Module Dimensions	19 x 38 x 253 mm. 0.2kg. GENUS 1U series mountable.	
Power Consumption	15W typical (with 18V 500mA LNB power)	4W typical
LNB Power		
Number of Modules Fitted	Total Power Available for LNB Powering at 18V	
16	115W	
14	120W	
≤13	Limited by module specifications	
Spec. Version	0.3	

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.