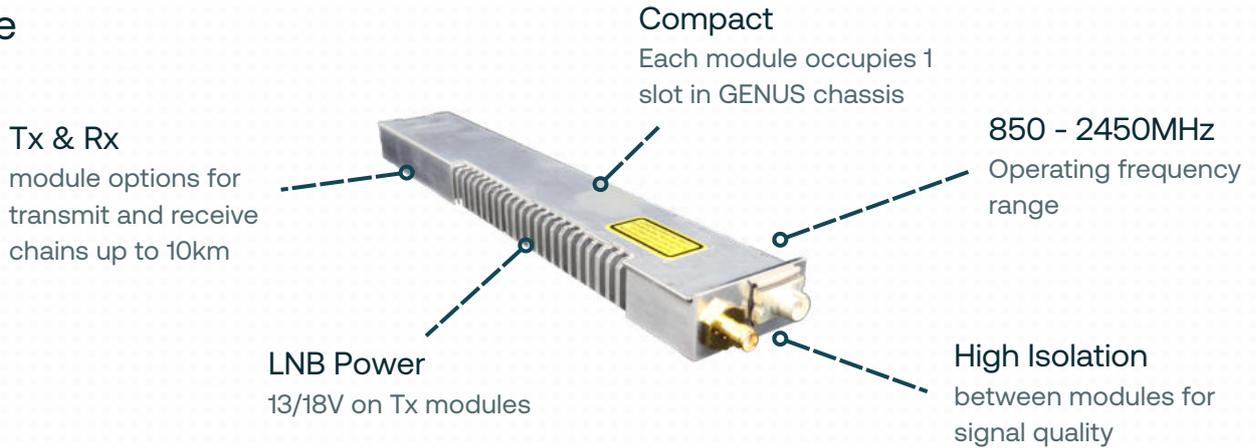


L-Band GENUS StingRay RF over Fibre module

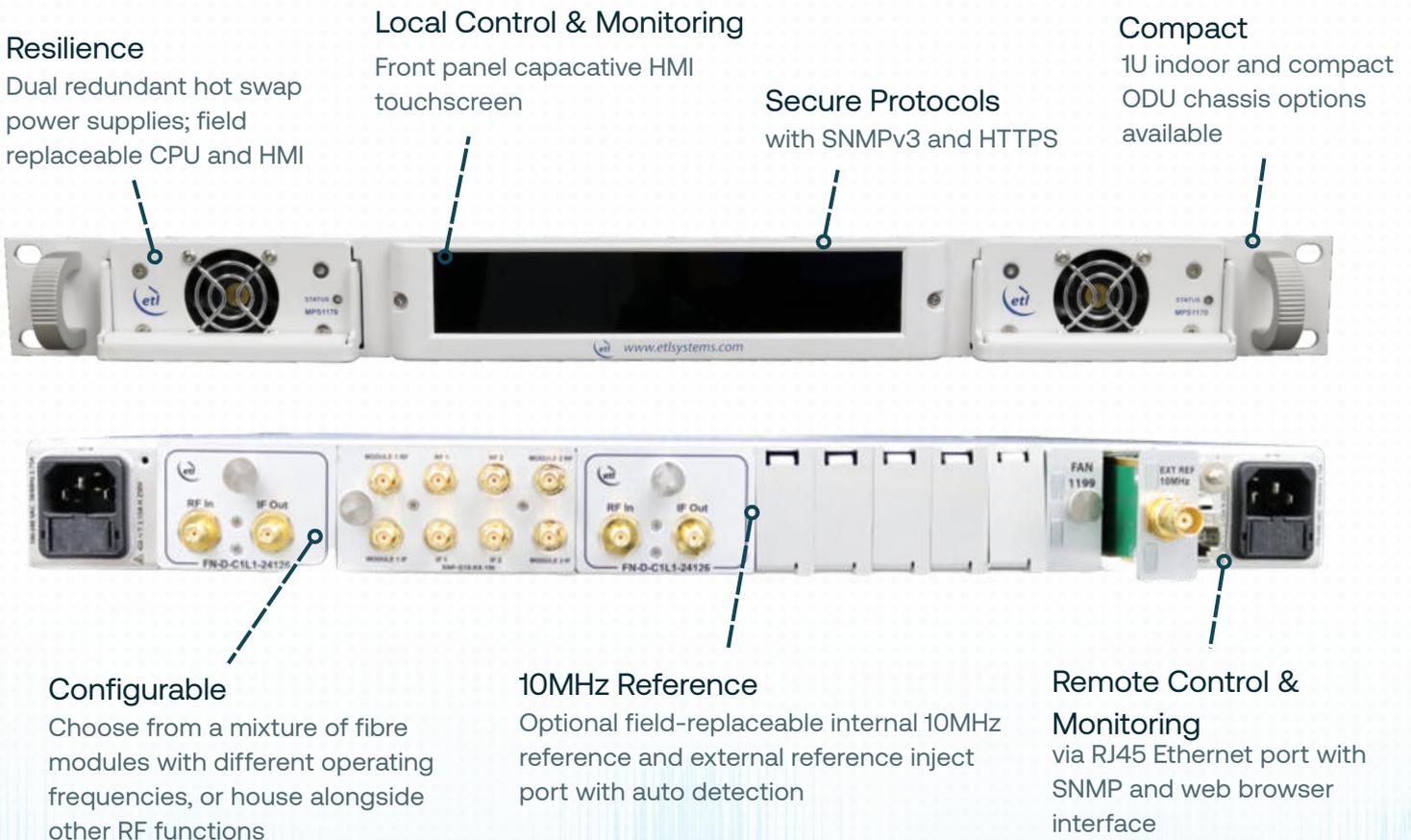
with 22KHz tone and 13V/18V LNB power

StingRay L-band Transmit and Receive RF Over Fibre modules to fit Genus 1U chassis or ODU. The transmit module can provide LNB power 13/18VDC, 22kHz tone up to 500 mA. When fitted with a 10 MHz distributing module the TX/RX module can inject an external or internal 10 MHz tone onto the L-band feed.

Module



Chassis





RF Parameters		
Model Numbers	SRY-G1S-TS2-179	SRY-G1S-RS2-180
Frequency Range	850-2450 MHz	
Flatness (dB)	850 - 2150MHz	±1.5 dB, Fixed gain mode
	2150 - 2450MHz	±2.0 dB, Fixed gain mode
	Any 36MHz	±0.25 dB, Fixed gain mode
Return Loss (db)	50 ohm SMA	18 dB typ., 14 dB min
	50 ohm BNC	18 dB typ., 14 dB min
	75ohm BNC	14 dB typ., 10 dB min
	75 ohm F-type	14 dB typ., 10 dB min
Output AGC flatness	±2.0 dB over full band. Input -10 to -40 dBm	
Gain Setting Modes	Manual Gain Control (MGC), Automatic Gain Control (AGC), Fixed Gain (FG)	
Manual Gain Range	60 dB (in 0.5 dB steps) The MGC gain mode allows link optimisation for better Noise or Distortion performance	
OIP3 Test condition: 1m fibre, 10dB gain, -22dBm tone levels	850 - 2150MHz	23 dBm typical, 20 dBm worst case
	2150 - 2450MHz	20 dBm typical, 17 dBm worst case
CNR (in any 36MHz) Test condition: 1m fibre, -10dBm RF i/p power, -10dBm RF o/p total power	-50 dB typical, -45 dB worst case	
Noise Figure Test condition: 1m fibre, -50dBm RF i/p power, -10dBm o/p power	9 dB typical, 12 dB worst case	
Group Delay Variation	<2ns over full band. <0.5ns over any 36MHz	
SFDR Test condition: 1m fibre, 10dB gain, -23dBm tone levels	850 - 2150MHz	107 dB/Hz ^{2/3} typ., 102 dB/Hz ^{2/3} min
	2150 - 2450MHz	103 dB/Hz ^{2/3} typ., 98 dB/Hz ^{2/3} min
RF Signal Range	Input: -70 to -10 dBm (total power) Operational i/p range Output: -70 to -10 dBm (total power) o/p range available under all i/p conditions. (Note that all Specifications are only 'typical' between -60 & -70 dBm unless otherwise detailed).	
Max RF Input	+16 dBm total power. Damage level, NOT operational.	
10MHz Level at Output	-10 to +10 dBm. User settable level via the chassis. Accuracy ±2 dB	
10MHz Isolation	-40 dB, between adjacent modules in same chassis.	
Laser Type	DFB. Optical isolator for improved performance	
Optical Wavelength	1310 ± 10 nm	1100 to 1650nm. Optimised for 1310nm and 1550 nm
Optical Power	Output: 4.5 ±2.5 dBm. 3.8 dBm typical	Input: 0 to 4.5 dBm. Max +10 dBm
Optical Connectors	FC/APC , SC/APC Single mode fibre. Use angle polish connectors only	
Module Dimensions	19mm x 38mm x 253mm. 0.2kg. Genus 1U series mountable.	
Power Consumption	15W Typical. With 18V 500 mA LNB Power.	4 W Typical
LNB Power	18/13V ±5 %, 500 mA max	
Module Swap / MTBF	Hot swap / >200,000 hours.	



LNB Power	
Number of Single modules fitted	Total Power Available for LNB Powering at 18V
16	115W
14	120W
≤ 13	Limited by module specifications
Spec. Version	1.0

Connector Options	
Connector Type	SRY-G1S-TS2-179-xxxx & SRY-G1S-RS2-180-xxxx
SMA 50 Ohm & SC/APC	SRY-G1S-TS2-179-S5SA & SRY-G1S-RS2-180-S5SA
BNC 50 Ohm & SC/APC	SRY-G1S-TS2-179-B5SA & SRY-G1S-RS2-180-B5SA
BNC 75 Ohm & SC/APC	SRY-G1S-TS2-179-B7SA & SRY-G1S-RS2-180-B7SA
F-Type 75 Ohm & SC/APC	SRY-G1S-TS2-179-F7SA & SRY-G1S-RS2-180-F7SA
SMA 50 Ohm & FC/APC	SRY-G1S-TS2-179-S5FA & SRY-G1S-RS2-180-S5FA
BNC 50 Ohm & FC/APC	SRY-G1S-TS2-179-B5FA & SRY-G1S-RS2-180-B5FA
BNC 75 Ohm & FC/APC	SRY-G1S-TS2-179-B7FA & SRY-G1S-RS2-180-B7FA
F-Type 75 Ohm & FC/APC	SRY-G1S-TS2-179-F7FA & SRY-G1S-RS2-180-F7FA

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.