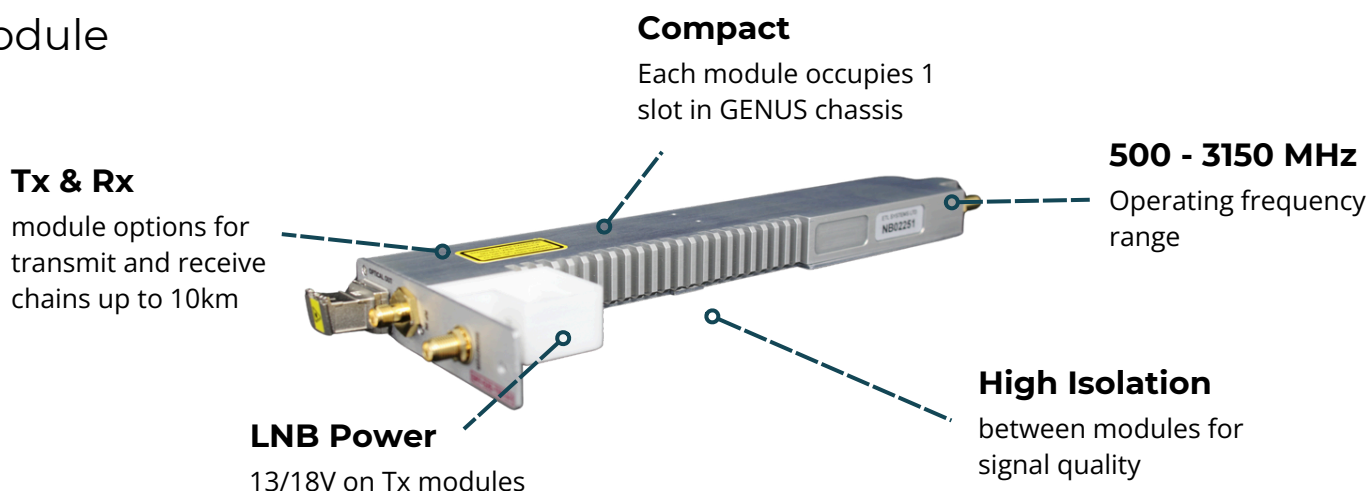


## S-Band GENUS StingRay RF over Fibre module

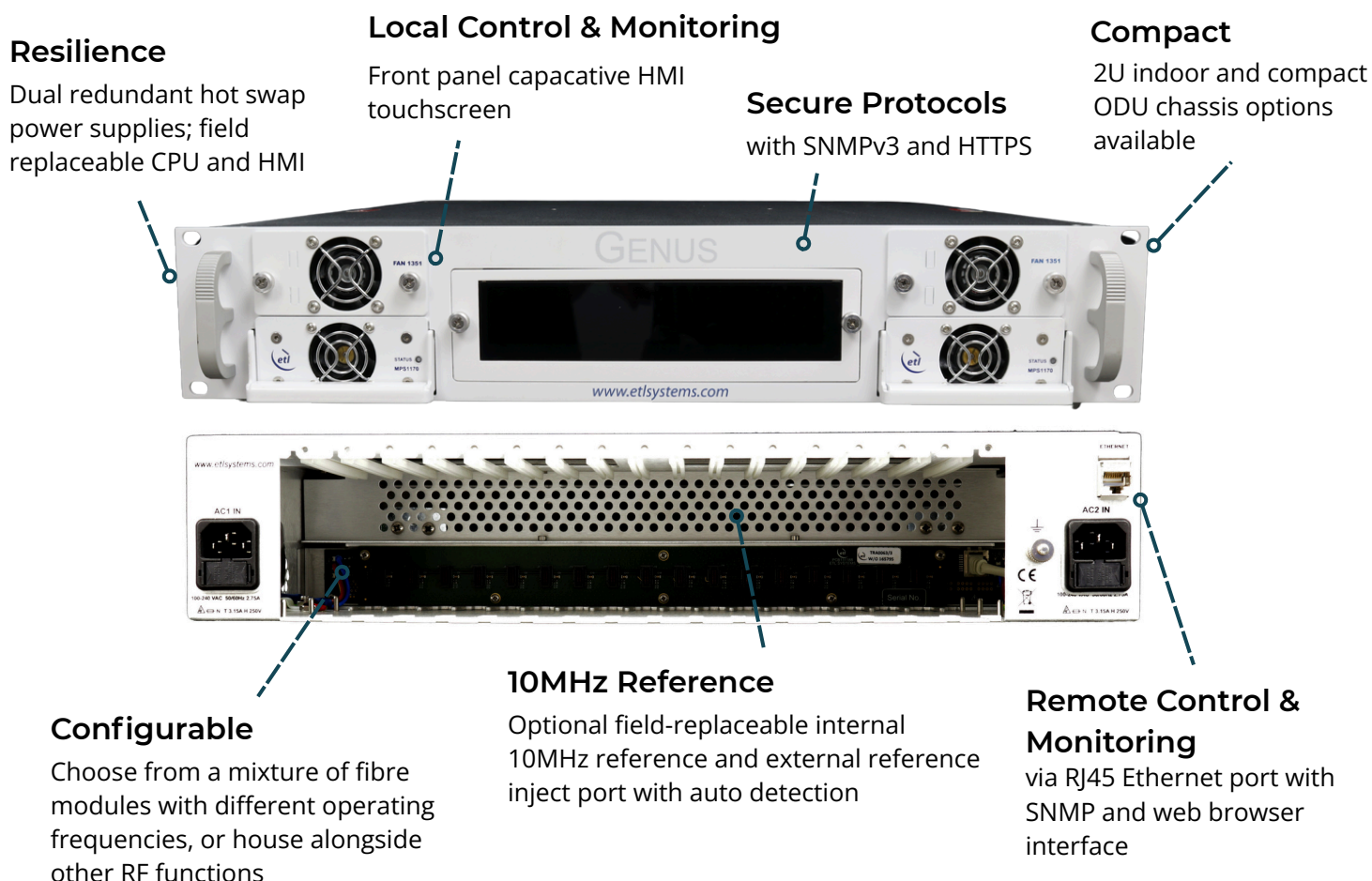
with 22KHz tone and 13V/18V LNB power

StingRay S-band Transmit and Receive RF Over Fibre modules to fit Genus 2U chassis. 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 module can inject an external or internal 10 MHz tone onto the S-band feed.

### Module



### Chassis



RF Parameters		
Model Numbers	SRY-G2S-TS6-311	SRY-G2S-RS6-312
Frequency Range	500-3150 MHz	
Flatness (dB)	850 - 2150MHz	±1.5 dB, Fixed gain mode
	500 to 3150 MHz	±2.0 dB, Fixed gain mode
	Any 36MHz	±0.25 dB, Fixed gain mode
Output AGC Flatness		±2.0dB over full band with Input -10 to -40 dBm
Return Loss (db)	50 ohm SMA	18 dB typ., 14 dB min
	50 ohm BNC	18 dB typ., 14 dB min
	75 ohm BNC	14 dB typ., 10 dB min (8 dB min >2450 MHz)
	75 ohm F-type	14 dB typ., 10 dB min (8 dB min >2450 MHz)
Gain Setting Modes	Manual Gain Control (MGC), Automatic Gain Control (AGC), Fixed Gain (FG)	
Manual Gain Range	60 dB (in 0.5 dB steps)	
Monitor Port (SMA 50 Ohm Connector)	-20dBc +/-3dB	
OIP3 <b>Test condition:</b> 1m fibre, 10dB gain, -22dBm tone levels	850 - 2150MHz	23 dBm typical, 20 dBm worst case
	500 to 3150 MHz	20 dBm typical, 17 dBm worst case
CNR (in any 36MHz) <b>Test condition:</b> 1m fibre, -10dBm RF i/p power, -10dBm RF o/p total power	-50 dB typical, -45 dB worst case	
Noise Figure <b>Test condition:</b> 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 <b>Test condition:</b> 1m fibre, 10dB gain, -23dBm tone levels	850 - 2150MHz	107 dB/Hz <sup>2/3</sup> typ., 102 dB/Hz <sup>2/3</sup> min
	500 to 3150 MHz	103 dB/Hz <sup>2/3</sup> typ., 98 dB/Hz <sup>2/3</sup> min
RF Signal Range	<b>Input:</b> -70 to -10 dBm (total power) Operational i/p range <b>Output:</b> -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 ±1 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 4.5dBm. Max 10 dBm
Optical Connectors	FC/APC , SC/APC, E2000/APC, Single mode fibre. Use angle polish connectors only	
Power Consumption	15W Typical. With 18V 500 mA LNB Power.	4 W Typical
LNB Power	18/13V ±5 %, 500 mA max	
Module Swap	Hot swap	
MTBF	>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	1.3

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.