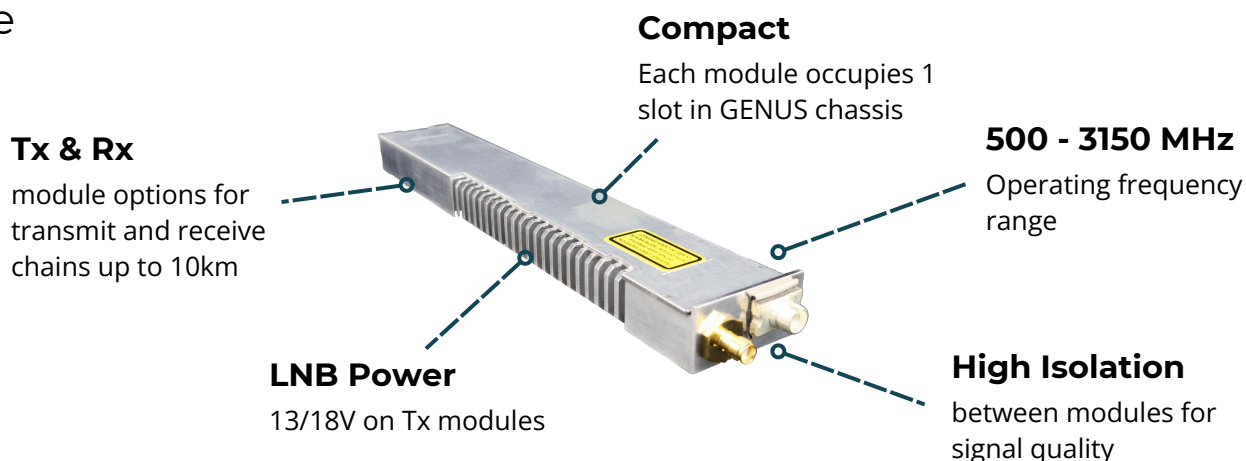


S-Band GENUS StingRay RF over Fibre module

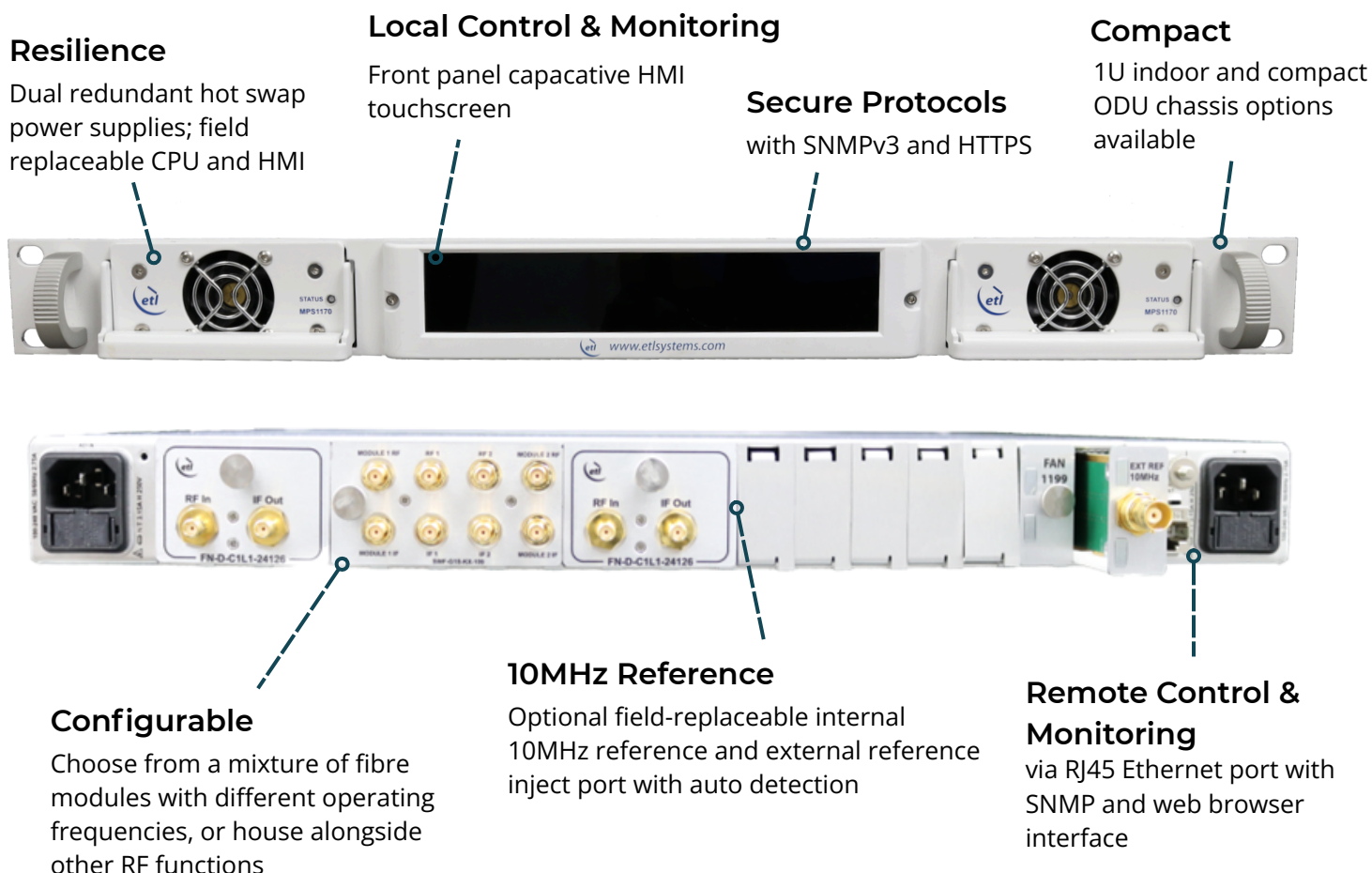
with 22KHz tone and 13V/18V LNB power

StingRay S-band Transmit and Receive RF Over Fibre modules to fit Genus 1U 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/RX module can inject an external or internal 10 MHz tone onto the L-band feed.

Module



Chassis



RF Parameters			
Model Numbers		SRY-G1S-TS6-161	SRY-G1S-RS6-162
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	
Return Loss (dB)	50 ohm SMA	18 dB typ., 14 dB min	18 dB typ., 14 dB min
	50 ohm BNC	18 dB typ., 14 dB min	18 dB typ., 14 dB min
	75 ohm BNC	14 dB typ., 10 dB min	16 dB typ., 12 dB min
	75 ohm F-type	14 dB typ., 10 dB min	16 dB typ., 12 dB min
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	850 - 2150MHz	23 dBm typical, 20 dBm worst case	
	500 to 3150 MHz	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. 1ns 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	
	500 to 3150 MHz	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 ±1 dBm.	Input: 0 to 4.5dBmo. Max 10 dBmo
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		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	1.6

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.