



RF Components

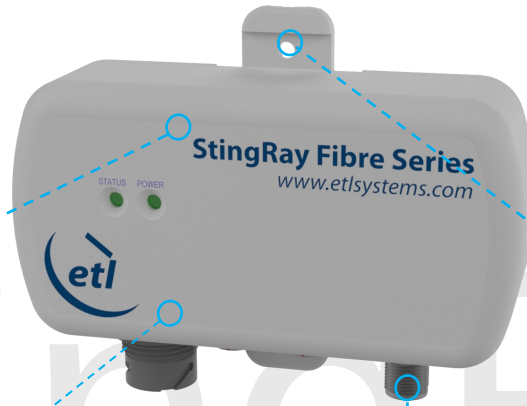
Model Number:  
**SRY-TX-L1-923**

# L-Band RF Over Fibre ODU

**1310nm Transmit**  
**850MHz to 2450MHz**

**Compact & Weatherproof**  
Housed in IP65 rated waterproof enclosure

**850-2450 MHz**  
Extended L-band Operating Frequency



**Monitoring**  
Optical and RF levels reported at receiver

**Flexible Mounting**  
Band on to pole or bolt to wall

- Compact waterproof housing
- Redundant hot swap external power supply
- Provided with short circuit protected LNB power 13/18V, 22kHz, 500mA max
- LED indicators for module & power and status
- For use with ETL's L-band receive units.

Available with RF connector options:

- 50 Ω N-Type
- 75 Ω F-Type

## RF Parameters

RF Parameters			
Capacity	One RF over Fibre Optical Transmit Unit		
Power Connector	1K - LEMO FGL.1K.302.CLLK75Z	Cable mount LEMO 1K series 2 pin	
Input ports	50Ω N-type, 75Ω F-type.		DC power available, do not connect to power source.
Fibre output connector	Senko IP-SC/APC		
Frequency	850MHz to 2450MHz		
Connector & impedances	50Ω	75Ω	
	N-type	F-type	
Input Return Loss (dB) Typ.	18	12	
	Min	10	
Output Return Loss (dB) Typ.	NA	NA	
	Min		
Gain flatness (dB)	±2.0	±2.0	Across band
OIP3 (dBm)	Typical 17 dBm Worst Case 14 dBm	Test condition: SRY-TX-L1-923 , 0 dB optical link loss, -22 dBm tones at 2150 and 2152 MHz	
CNR (in any 36MHz) (dB)	Typical -50 dB Worst Case -45 dB	Test condition: SRY-TX-L1-923 , 0 dB optical link loss, -10 dBm RF i/p power, -10 dBm RF o/p total power.	
NF (dB)	Typical 12dB Worst Case 15dB	Test condition: SRY-TX-L1-923 , 0 dB optical link loss, -50 dBm RF i/p power, -10 dBm o/p power	
Group Delay variation (ns)	2 over full band 1 over any 36MHz.		
SFDR (dB/Hz <sup>2/3</sup> )	105 typ., 100 min	Test condition: SRY-TX-L1-923 , 10 km fibre, -13 dBm tones at 2150 and 2152 MHz	
IMD3 (dBc)	-65 typ., -60 min.		
RF Input Signal Range, total power (dBm)	-60 to -10		Operational i/p range
Max RF input total power (dBm)	16		Damage level, NOT operational.
LNB Power	13/18 Vdc, 22 kHz, 500mA max		Short circuit protected
Module input voltage (V DC)	12		Use with PSU SRY-12-916-0KXX
DC consumption (W)	15		Max with 18V, 500mA LNB power
External PSU Redundancy	Dual redundant hot swap external units		Separate Unit
Local Monitoring	Full remote monitoring, PSU voltage, RF amp current, temperature, laser power, RF modulation power, laser optical power.		Contact ETL if remote monitoring and control is required.
MTBF	> 200,000 hours		

### Broadcast



### Marine Oil & Gas



### SNG & VSAT



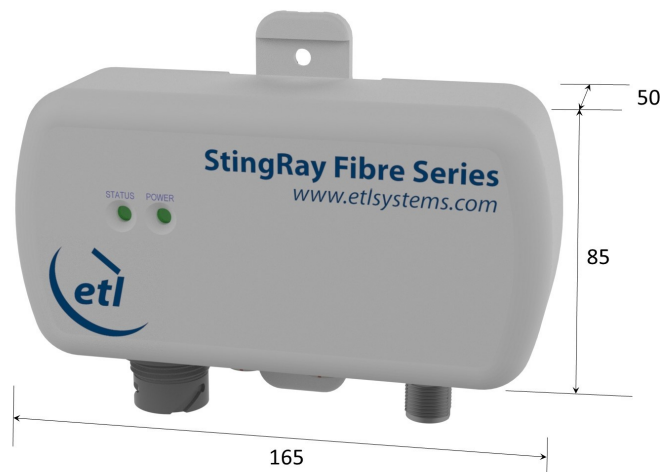
### Satellite Teleport



**Technical specifications and operating parameters**

Optical Parameters		
Laser Type	DFB	Two stage optical isolator for improved performance
Optical Wavelength (nm)	1310 ± 10	
Optical Power output (dBm)	3.8 ±2.5	
Optical Connectors	Senko IP-SC/APC	Single mode fibre
Control, Monitoring & Alarms		
Control	1 LNB on/off	
Switch	2 LNB 13/18 v	
Position	3 LNB 22 kHz on/off	
	4 AGC on/Gain fixed	
Indicator lights		
Power	Module powered	
Status Green	Module OK	
Status Red	Internal monitoring alarm	
Monitoring includes	Laser Optical Output Power Status of amplifier stages Module temperature	Monitored in each module
AGC	Factory set	Once AGC level set, gain can be fixed
Environmental Conditions		
Operating Temperature (°C)	-20°C to +55°C	
Storage Temperature (°C)	-40°C to +85°C	
Location	Indoor or outdoor use to IP65	Mount out of direct sunlight
Humidity	TBA	Relative Humidity
Altitude	10,000 feet AMSL	Above Mean Sea Level
Physical Dimensions & Parameters		
Weight	TBD Kg	
Dimensions	85mm high x 50mm deep x 165mm wide	Excluding mounting flanges and connectors
Front Panel Colour	RAL9003 – White (Semi-Matte)	

**Physical Dimensions (mm)**



Note: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved specification accuracy.  
 Note-1: Typical parameters are guide figures and measured data may deviate from the quoted figures. ETL endeavours to exceed the quoted typical parameters where practically possible.  
 Note-2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage. For reliable long term operation do not exceed the parameters given in above.  
 Note-3: The spec table is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.