



RF Components

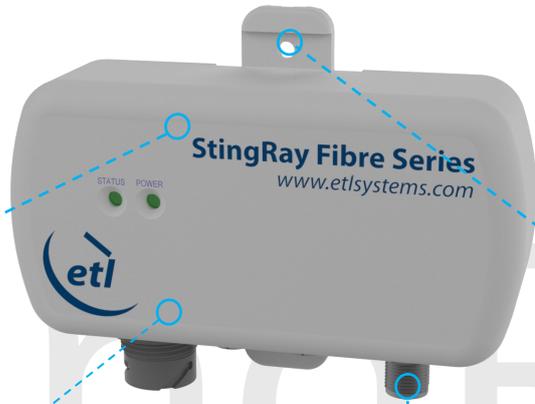
Model Number:  
**SRY-TX-B2-925**

# Broadband RF Over Fibre ODU

**1310nm Transmit**  
**50MHz to 2450MHz**

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

**50-2450 MHz**  
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 Broadband receive units.

Available with RF connector options:

- 50 Ω N-Type
- 75 Ω F-Type

## RF Specification

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	50MHz to 2450MHz		
Connector & impedances	50Ω N-type	75Ω F-type	
Input Return Loss (dB) Typ.	18	12	
Min	12	10	
Output Return Loss (dB) Typ.	NA	NA	
Min			
Gain flatness 50 to 200 MHz (dB)	±2.0	±2.0	
Gain flatness 200 to 850 (dB)	±2.0	±2.0	
Gain flatness 850 to 2450 (dB)	±2.0	±2.0	
OIP3 (dBm)	Typical 17 dBm Worst Case 14 dBm	Test condition: SRY-TX-B2-925 , 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-B2-925 , 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-B2-925 , 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-B2-925 , 10 km fibre, -13 dBm tones at 2150 and 2152 MHz	
IMD3 (dBc)	-65 typ., -60 min.	Test condition: SRY-TX-B2-925 , 10 km fibre, -13 dBm tones at 2150 and 2152 MHz	
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-xx1K	
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





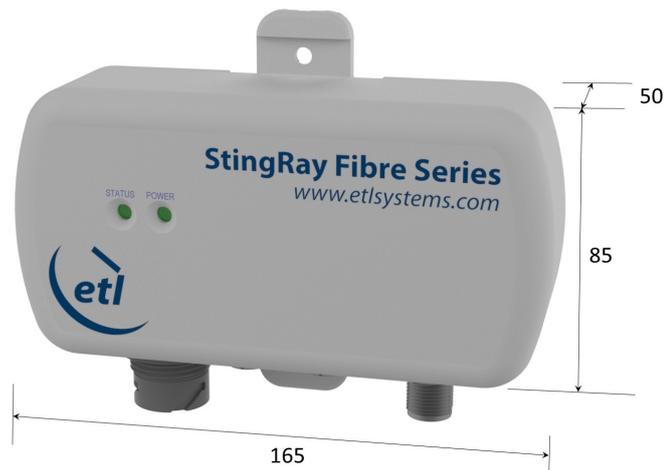
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Model Number:  
**STRY-TX-B2-925**  
Broadband RF Over Fibre ODU

### 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		Monitored in each module
		Laser Optical Output Power
		Status of amplifier stages
		Module temperature
AGC		Once AGC level set, gain can be fixed
		Factory set
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
Humidity		TBA
Altitude		10,000 feet AMSL
		Mount out of direct sunlight
		Relative Humidity
		Above Mean Sea Level
Physical Dimensions & Parameters		
Weight		TBD Kg
Dimensions		85mm high x 50mm deep x 165mm wide
Front Panel Colour		RAL9003 – White (Semi-Matte)
		Excluding mounting flanges and connectors

### 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.

ETL SYSTEMS LIMITED  
Coldwell Radio Station  
Madley  
Hereford  
England HR2 9NE

TELEPHONE  
+44 (0)1981 259020  
  
EMAIL  
info@etlsystems.com

FACSIMILE  
+44 (0)1981 259021  
  
WEB  
www.etlsystems.com

