



RF Components

# StingRay GPS Over Fibre

Standalone Receive Module

850MHz to 2450MHz

Model Number:  
**SRY-RX-L1-466**

- Monitoring of both the Rx via 20 dB monitor port and the remote Tx via Status LED
- Powered by single or dual redundant 12V supplies
- Intended for use with ETL's GNSS transmit outdoors unit SRY-TX-L1-911

Available with connector options:

- 50 Ω SMA or BNC
- 75 Ω BNC or F-Type
- FC/APC
- SC/APC



**850-2450 MHz**  
Operating frequency range.



**Compact**  
Housed in rugged compact enclosure



**Flexible Mounting**  
Through hole mounting option

Specification			
Capacity	One GNSS over Fibre Receive Unit		
Output port	50Ω BNC, SMA		
Monitor port	50Ω BNC, SMA	Output level -20 dB	
Frequency	850MHz to 2450MHz		Use Tx with tuned antenna to select required GNSS signal.
Connector & impedances	50Ω SMA	50Ω BNC	
Link Gain (dB)	50±3	50±3	Max across band and link
Gain flatness (dB)	Any 500MHz ±2.0	±2.0	
	Any 36MHz ±0.5	±0.5	
Input Return Loss (dB)	Typ. n/a	n/a	
	Min n/a	n/a	
Output Return Loss (dB)	Typ. 18	18	
	Min 12	12	
Input AGC level Max (dBm)	-10	At transmitter	
Input AGC level Min (dBm)	-60	At transmitter	
Output AGC level Max (dBm)	-40	Set at receiver	
Output AGC level Min (dBm)	-60	Set at receiver	
Noise Figure (dB)	16 TBC	Typ. link 1.5GHz, -50dBm in & out	
CNR (in any 4 MHz) (dB)	60 TBC	Typ. link 1.5GHz, -50dBm in & out, gain fixed	
1dB GCP (dBm)	-30 TBC	Typ. link 1.5GHz, -50dBm in & out, gain fixed	
1dB Gain Compression point	-30 TBC	Typ. link 1.5GHz, -50dBm in & out, gain fixed	
OIP3 (dBm)	-19 TBC	Typ. link 1.5GHz, -50dBm in & out, gain fixed	
SFDR (dB/Hz <sup>2/3</sup> )	105 TBC	Typ. link 1.5GHz, -50dBm in & out	
DC consumption	4W	Max. consumption at steady state	
Alarms	Antenna fail	25 mA current sink switched out	
Local Monitoring	Monitoring of module and signal from Tx Via LED. LED is GREEN if optical power is between -6.2dBm & +9dBm and RED if out of this range. Contact ETL if remote monitoring and control is required.		
MTBF	> 120,000 hours	Module MTBF TBC	

## Broadcast



## Marine Oil & Gas



## SNG & VSAT



## Satellite Teleport





RF Components

Model Number:  
**SRY-RX-L1-466**

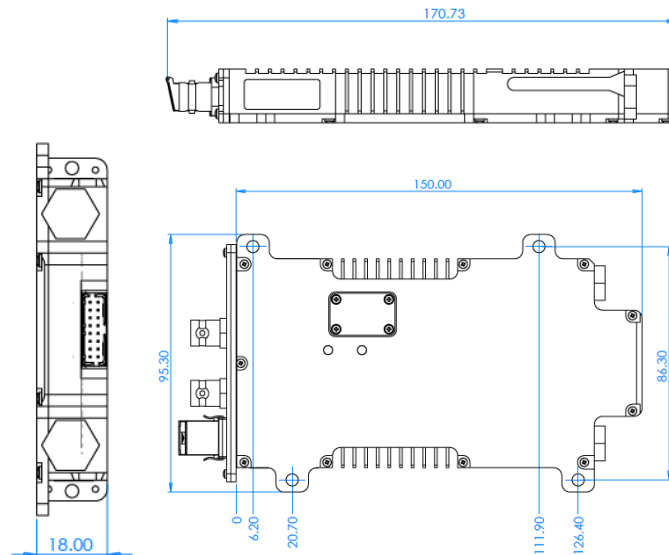
StingRay GPS Over Fibre Standalone Module

**Technical specifications and operating parameters**

Optical Parameters		
Optical Wavelength	1100 to 1650nm	Optimised for 1310nm and 1550 nm
Optical power in	0 to 4.5dBm	Max 10 dBm
Optical Connectors	SC/APC FC/APC	Single mode fibre Use angle polish connectors only
Environmental conditions		
Operating Temperature (°C)	-20°C to +55°C	
Storage Temperature (°C)	-40°C to +85°C	
Location	Indoor use only	Outdoor use only in ETL ODU
Humidity	20 to 90% non-condensing	Relative Humidity
Altitude	10,000 ft AMSL operational 30,000 ft AMSL storage/transport	Above Mean Sea Level
Physical Dimensions & Parameters		
Weight	0.35 Kg	
Dimensions	43mm high x 205mm deep x 18mm wide	Mounting flanges provided
Front Panel Colour	RAL9003 – White (Semi-Matte)	

Control, Monitoring & Alarms				Position marked on switch			Output
Control	1	Reserved	Remove cover to access DIP switch. Output power settable -30 to -10 dBm in 3 dBm steps.	2	3	4	Power/dBm
DIP Switch	2	Output power bit 3		0	0	0	-61
Position	3	Output power bit 2		0	0	1	-58
	4	Output power bit 1		0	1	0	-55
	5	AGC on/Gain fixed		0	1	1	-52
	6	Reserved		1	0	0	-49
Indicator lights	Module powered Module OK			1	0	1	-46
Monitoring includes	Status of amplifier stages Module temperature	Monitored in each module		1	0	0	-43
AGC	Settable output power level	Once AGC level set, gain can be fixed		1	1	1	-40

**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

