



Model Number:  
**SRY-TX-Y-481**

RF Components

# Optical Fibre 10MHz Reference Transmit Module

Optical Wavelength  $1310 \pm 10$  nm

- Compact EMC sealed housing featuring an RF monitor port
- Converts a 10 MHz reference signal to 1310nm for transmission over a single mode fibre.
- -20 dB monitor port

Available with connector options:

- FC/APC or SC/APC optical connectors
- SMA or BNC in 50 ohm RF connectors

### Settings

Switch 4 Only  
Fixed Gain  
Lights for power & status

### Compact

EMC sealed standalone housing with RF monitoring port

### 10MHz

Reference tone  
Converted to  
**1310nm Optical**

**Flexible Mounting**  
Through hole mounting

**Monitoring Port**



RF Parameters		
Frequency Range	10 MHz	Reference tone
Return Loss	50 ohm SMA 50 ohm BNC	18 dB typ., 12dB min 18 dB typ., 12dB min
RF Input Signal Range	0 to +15dBm (total power)	Operational i/p range
Max RF input	16dBm total power	Damage level, NOT operational.
Monitor Port	-20dB $\pm$ 3dB	
Phase Noise	0.1 Hz	-114 dBc/Hz typical, -98 dBc/Hz maximum
	1 Hz	-123 dBc/Hz typical, -117 dBc/Hz maximum
	10 Hz	-130 dBc/Hz typical, -124 dBc/Hz maximum
	100 Hz	-141 dBc/Hz typical, -135 dBc/Hz maximum
	1000 Hz	-153 dBc/Hz typical, -147 dBc/Hz maximum
	10000 Hz	-153 dBc/Hz typical, -147 dBc/Hz maximum
	100000 Hz	-153 dBc/Hz typical, -147 dBc/Hz maximum
	1000000 Hz	-153 dBc/Hz typical, -147 dBc/Hz maximum
Optical Parameters		
Laser Type	DFB	Two stage optical isolator for improved performance
Optical Wavelength	$1310 \pm 10$ nm	
Optical Power output	$5.5 \pm 2$ dBm	
Optical Connectors	FC/APC SC/APC	Single mode fibre Use angle polish connectors only

## Broadcast



## Marine Oil & Gas



## SNG & VSAT



## Satellite Teleport

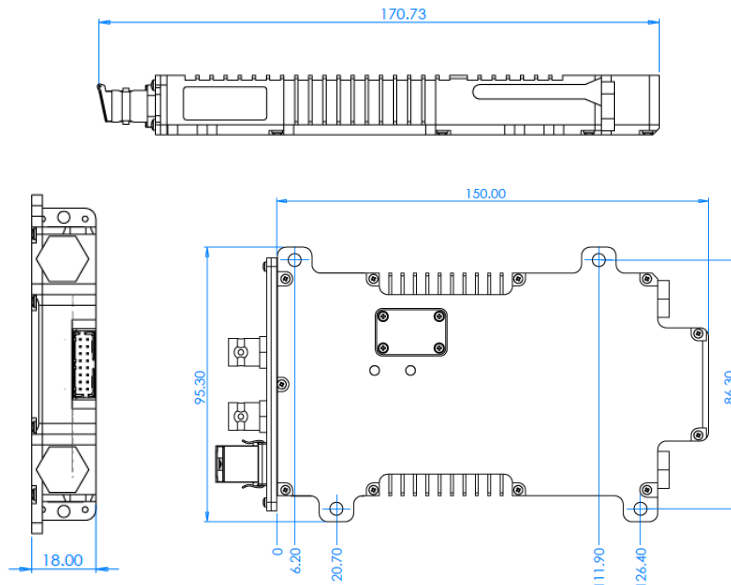


Non RF Parameters		
Module swap	Hot swap	
Power supply voltage	12V $\pm$ 1V	Single or dual redundant power
Power consumption	6W	
MTBF	TBD hours	Module MTBF
Control, Monitoring & Alarms		
Control	Local	Switch 4 OFF = AGC ON = Fixed Gain
Temperature monitors	Each module monitored,	All are independently monitored and reported.
Monitoring includes	Laser Optical Output Power RF input power, -10 to +10 dBm Status of amplifier stages	In each module Local via LED.
AGC	Factory set	Maintains optimum level of laser modulation over input range

### Technical specifications and operating parameters

Environmental Conditions		
Operating Temperature	-20°C to +60°C	
Storage Temperature	-40°C to +90°C	
Location	Indoor use	Outdoor Use available in a different Model Number
Humidity	20 to 90% non-condensing	Relative Humidity
Altitude	10,000 ft AMSL	Above mean sea level
Mass	0.35 Kg typical	
Size	87.8 x 18 x 150 mm	See Figure 1.

### Physical Dimensions (mm)



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.

Note-4: Any combination of RX or TX modules of series 2xx can be fitted into this chassis, SRY-C2xx series.

Note-5: The receiver is optimized for operation at 1310 nm and 1550 nm but may be used over a wide wavelength range ranging from 850 nm to 1600 nm.