



Model Number:
SRY-TX-Y-481

RF Components

Optical Fibre 10MHz Reference Transmit Module

Optical Wavelength 1310 ± 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 ± 10 nm	
Optical Power output	5.5 ± 2 dBm	
Optical Connectors	FC/APC SC/APC	Single mode fibre Use angle polish connectors only

Broadcast



Marine Oil & Gas



SNG & VSAT



Satellite Teleport

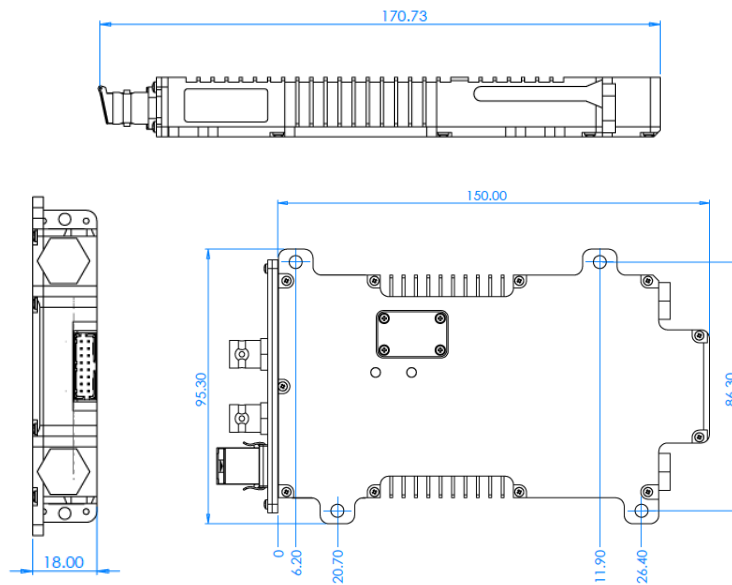


Non RF Parameters		
Module swap	Hot swap	
Power supply voltage	12V \pm 1V	Single or dual redundant power
Power consumption	6W	
MTBF	TBD hours	Module MTBF
Control, Monitoring & Alarms		
Control	Local	Switch 4 Only to set Fixed Gain
Temperature monitors	Each module monitored,	All are independently monitored 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.