

## **Model Number: SRY-RX-Y-482**

**RF** Components

## **Optical Fibre 10MHz Reference Receive Module**

Optical Wavelength 1100 to 1650nm



Single mode optical receiver for 10MHz reference signals.

- compact EMC sealed housing featuring an RF monitor port
- 1100nm to 1650nm optical input is converted to 10MHz signal for timing applications

#### Available with connector options:

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

		RF PARAMETERS	
Frequency Range		10 MHz	Reference tone
Return Loss			
	50 ohm SMA	18 dB typ., 12dB min	All RF connectors are female.
50 ohm BNC		18 dB typ., 12dB min	All RF ports are DC blocked
Monitor port		-20dB ±3dB	Mounted om module
RF Output Signal Range		0 dBm to +14 dBm (total power)	o/p range available under all i/p conditions
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	
Optical Wavelength		1100 to 1650nm	Optimised for 1310nm and 1550 nm
Optical power in		0 to 7 dBm	Max 10 dBm
Optical Connectors		FC/APC	Single mode fibre
		SC/APC	Use angle polish connectors only









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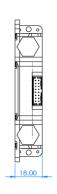
### Optical Fibre 10MHz Reference Receive Module

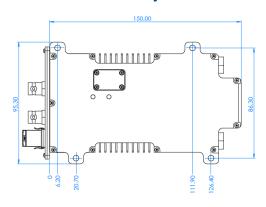
		Non RF Parameter	rs	
Module swap		Hot swap		
Power consumption		4 W		
MTBF		>250,000 hours TBC	Module MTBF TBC	
		Control, Monitoring & A	Alarms	
Control		Local	Local control via DIP switch.	
Settings	Sw1	Reserved / Unused		
	Sw2	+ 8 dBm		
	Sw3	+ 4 dBm	When set to AGC mode.	
	Sw4	+ 2 dBm		
	Sw5	Fixed Gain	OFF = AGC On = Fixed Gain	
Temperature monitors		Each module monitored,	All are independently monitored and reported.	
Monitoring		Optical input power	In each module via LED	
		Status of amplifier stages		
		RF output power		
AGC		Settable output power level	0 to +15 dBm in 2 dB steps via DIP switch	

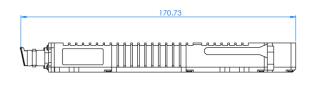
### **Technical specifications and operating parameters**

Environmental conditions					
Operating Temperature	-20°C to +60°C				
Storage Temperature	-40°C to +90°C				
Location	Indoor use	Outdoor use as part of ETL ODU only			
Humidity	20 to 90% non-condensing	Relative Humidity			
Altitude	10,000 ft AMSL operational 30,000 ft AMSL storage/transport	Above mean sea level			
Mass	0.35 Kg typical				
Size	87.8 x 18 x 150 mm				

### **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.

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