Optical Fibre 10MHz Reference Receive Module

1310nm Optical
Converted to
10 MHz Reference

Settings
Controlled by a 5 position switch with indicator lights for power & status

Flexible Mounting
Tapped screw & through hole mounting options

Compact
EMC sealed standalone housing with RF monitoring port

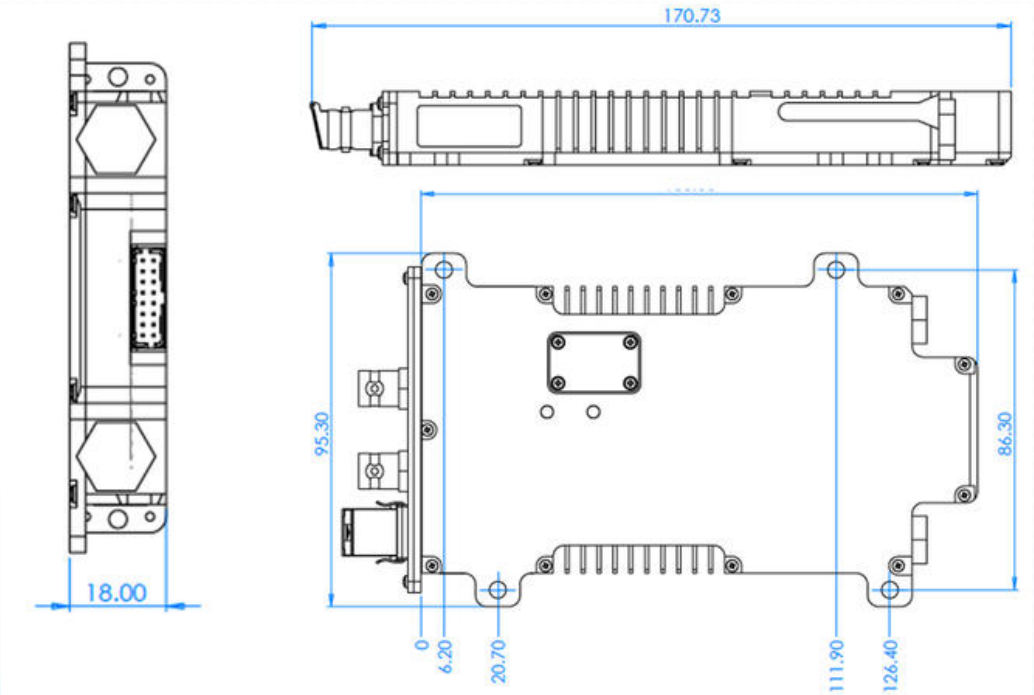
RF Parameters			
Frequency Range		10MHz	
Return Loss	50 ohm SMA	18 dB typ., 12dB min	All RF connectors are female. All RF ports are DC blocked
	50 ohm BNC	18 dB typ., 12dB min	
RF Output Signal Range		0 dBm to +14 dBm (total power)	o/p range available under all i/p conditions
Monitor Port		20dB ±3d	Mounted on module
Phase Noise		0.1Hz 1Hz 10Hz 100Hz 1000Hz 10000Hz 100000Hz 1000000Hz	-114 dBc/Hz typical, -98 dBc/Hz maximum -123 dBc/Hz typical, -117 dBc/Hz maximum -130 dBc/Hz typical, -124 dBc/Hz maximum -141 dBc/Hz typical, -135 dBc/Hz maximum -153 dBc/Hz typical, -147 dBc/Hz maximum -153 dBc/Hz typical, -147 dBc/Hz maximum -153 dBc/Hz typical, -147 dBc/Hz maximum -153 dBc/Hz typical, -147 dBc/Hz maximum
Optical Parameters			
Optical Wavelength		1100 to 1650nm	Optimised for 1310nm and 1550 nm
Optical Power Output		0 to 7 dBm	Max 10 dBm
Optical Connectors		FC/APC SC/APC	Single mode fibre Use angle polish connectors only

Non RF Parameters		
Module swap	Hot swap	
Power consumption	4W typical	
MTBF	>250,000 hours TBC	Module MTBF

Control, Monitoring & Alarms			
Control		Local	Local control via DIP switch.
Temperature Monitors		Each module monitored	All are independently monitored and reported.
Settings	Sw1	Reserved / Unused	
	Sw2	+ 8 dBm	When set to AGC mode.
	Sw3	+ 4 dBm	
	Sw4	+ 2 dBm	
	Sw5	Fixed Gain	OFF = AGC On = Fixed Gain
Monitoring includes		Optical input power Status of amplifier stages RF output power	In each module Local via LED.
AGC		Settable output power level	0 to +15 dBm in 2 dB steps via DIP switch

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 operational 30,000 ft AMSL storage/transport	Above mean sea level
Mass	0.35kg	
Size	87.8 x 18 x 150 mm	See below

Physical Dimensions (mm)



Note 1: The specification 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 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.