**Product Information Datasheet** 

# L-BAND over Fiber Tx+Rx Basic 1 Ch Kit



L-band over fiber, RF Fiber tx rx, l band satellite extender, DTH over fiber

### Preview



### **Short Description**

L-Band RF satellite signal extender over fiber optic cable transport system. multiple L-band fiber optic transport up to 80 Km. Can also provide LNB power at various voltages.

Thor Fiber Satellite L-Band RF Over Fiber Transmitter and Receiver kit



## Thor Fiber Satellite L-Band RF Over Fiber Transmitter and Receiver kit

#### Model # F-Lband-Tx/Rx

The L-Band fiber optic Transmitter/Receiver pair are used for transporting RF Satellite signals in the L Band over fiber from the antenna to the satellite receiver. L-band RF signals have a very limited range over coaxial cable, typically no more than a few hundred feet. By transporting the L-Band RF signal over an optical fiber this range can be extended to over 50 miles. Fiber optic cables are much smaller and easier to work with than traditional copper coax. Additionally our units provides optional 13/18V LNB power as well as Automatic Gain Control (AGC) to manage RF input level. Fiber optic transport of satellite signals is useful in many applications, such as transportation of signals from a remote satellite farm to a broadcaster's headend, uplink and downlink applications, and DBS services. This fiber satellite (SAT) extender can even transport broadband CATV RF over fiber optic cable. Thor Offers CWDM multiplexing solutions for transportation of up to 8 distinct L-Band signals over a single fiber, as well as multicasting solutions over several different fibers via optical coupling. Custom solutions are available, contact Thor today for help with your specific L Band over fiber needs.



#### **Model Selection**

Standard Model Numbers

lodel Number	<b>Description</b> (NOTE : All units ,TX's and RX's comes with the AC power supplies )
• F-LBAND-Tx	L-BAND Singlemode Fiber Transmitter for 10km
• F-LBAND-Rx	L-BAND Singlemode Fiber Reciever for 10km
• F-LBAND-Tx-40	L-BAND Singlemode Fiber Transmitter for 40km
• F-LBAND-Rx-40	L-BAND Singlemode Fiber Reciever for 40km
• F-LBAND-Tx-80	L-BAND Singlemode Fiber Transmitter for 80km
• F-LBAND-Rx-80	L-BAND Singlemode Fiber Reciever for 80km
• F-LBAND-Tx-120	L-BAND Singlemode Fiber Transmitter for 120km
• F-LBAND-Rx-120	L-BAND Singlemode Fiber Reciever for 120km

## Specification

## **Transmitter Properties**

• Wavelength	1310 nm (standard) 1550 nm (optional) FP/DFB
• Output Power	+2.0 dBm +/- 2 dB
• Frequency Response Range	45 - 2800 MHz
• RF Input Level	55 - 78 dBµV
• LNB Power (optional)	13 or 18 VDC /650mA Max 22KHz
• RF Connector	F-Connector or by request
• RF Return Loss	13 dB
• RF Input Impedance	75 Ohm
• CNR	40 dB
• IMD	40 dB
<b>Reciever Properties</b>	
• Wavelength	1290 - 1600 nm
• Optical input power range	-13 - 1 dBm (sensitivity -13 dBm)
• Frequency Range	45 - 2800 MHz
Output RF Response Levels	
• Optical Input = 0 dB	RF Output = 88 dBuV
• Optical Input = -3 dB	RF Output = 82 dBuV
• Optical Input = -6 dB	RF Output = 74 dBuV
• Optical Input = -9 dB	RF Output = 68 dBuV

• Optical Input = -12 dB	RF Output = 63 dBuV
<b>General Parameters</b>	
• Power Supply Info	18VDC, 3.5W
• Tempurature Range	(-45) - 150 F
• RF Connectors	F-Connector or by request
Optical Connectors	SC/APC IMPORTANT NOTE*** (it is very important to interface our unit with SC/APC - Angle Polished Connector to avoid any light reflections. If your fiber is terminated with the SC, ST, FC /PC flat connector, you need to use an optical jumper from PC type to SC/APC for proper conversion.
• Dimensions	118 mm x 210 mm x 40 mm
• Weight	0.25 kg