

# Datasheet : F-LB61-CWDM-TxRx



# 6 Ch L-Band Satellite Over single Fiber Extender Transmitter and Receiver 54-3000Mhz-CWDM

#### Fiber Optic 6 LNB to SWM Switch Extender System for 6 Polarity Satellite TV

The F-LB61 system from Thor Fiber is designed for use with satellite TV systems that have six LNB coax cables coming from the antennas. These are typically systems that support an additional antenna used for international content or free to air programming. The LB61 solution will work with most standard satellite TV antennas such as Directv® and Dish Network® systems. LB61 creates a fiber optic link between the satellite antenna and the single wire multiswitch portion of the TV system. This can be used to overcome distance limitations between the antenna and the rest of the system, or to distribute the output from a single antenna to multiple TV distribution locations. The standard LB61 system can be used to deliver the output from a satellite antenna to up to 32 individual optical receivers. The output from each of these optical receivers is identical to the output from the original satellite antenna. There is no way that the equipment from the television provider can detect that it is not directly connected to its own satellite antenna.

The most common application for the LB61 system is extending the maximum distance between a television system and its satellite dish antenna. Without the use of a Thor system, the satellite antenna must be installed within 100 meters of a multiswitch or receiver equipment. This is not a problem for most residential or household type consumer applications; but presents a significant obstacle in larger high rise buildings or corporate installations. The LB61 system increases the flexibility of satellite TV systems by overcoming the distance limitation between the antenna and the rest of the TV system.



#### Features:

- Up to 6 RF feeds from satellite 4 LNB's over 1 strand of Single mode fiber
- Wide frequency response 54-3000Mhz
- Compatible with multiple providers such as DirecTV, Dish Network, Free-to-air
- Designed for use with Single Wire Multiswitch systems
- Gain Control -AGC / Manual
- Up to 32 end points Receivers from a single transmitter, using 1x32 optical splitter
- Plug and Play
- Does not optically saturate
- RF Signal Input to the Transmitter = RF Signal Output from the receiver (100% transparent)
- Transmitter RF Input can power LNB- 13V or 18V
- Sends 22Khz control tone
- Additional ATSC RF from local antenna transport possible because it supports 54-3000Mhz spectrum
- Sends 22Khz control tone
- LCD display and Front panel management
- The transmitter displays RF Input Power for individual RF feeds and Optical Output power for each individual 6 CWDM lasers
- The receiver displays Optical input power from each of the 6 lasers, including RF output Power
- Internal Power AC power supply 110V-220V
- Redundant power supply

**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.

#### Model Selection:

- F-LB61-TX/RX 6 LNB over fiber up to 20Km
- F-LB61-TX/RX-40 6 LNB over fiber up to 40Km
- F-LB61-TX/RX-80 6 LNB over fiber up to 80Km
- F-SNMP (IP Ethernet SNMP monitoring option for the transmitter and receiver)



## **Specifications:**

RF Inputs	6x Type-F 75 Ohm
Frequency Range	54-3000Mhz
Gain Control	AGC Mode / Manual Mode
	+20 to +35 dBmV
RF Input Power Level	80 to 95 dBµV
	-29 to -14dBm
Optical Wavelength	6x CWDM 20nm Spacing 1510-1610nm
Optical Output Power	3.0 dBm (2mW) - standard
	1 SC/APC
Optical Output Ports	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.
Laser Type	SC/APC for proper conversion. 6x Feedback Controlled DFB type CWDM
Laser Type RF Return Loss	
	6x Feedback Controlled DFB type CWDM
RF Return Loss	6x Feedback Controlled DFB type CWDM 12 dB
RF Return Loss RF Link Gain	6x Feedback Controlled DFB type CWDM 12 dB 25 dB SNMP Network (optional, costs additional)
RF Return Loss RF Link Gain Control Interface	6x Feedback Controlled DFB type CWDM 12 dB 25 dB SNMP Network (optional, costs additional) Front Panel
RF Return Loss RF Link Gain Control Interface Power Supply	6x Feedback Controlled DFB type CWDM   12 dB   25 dB   SNMP Network (optional, costs additional)   Front Panel   110 / 220 VAC Auto Switching
RF Return Loss RF Link Gain Control Interface Power Supply Power Consumption	6x Feedback Controlled DFB type CWDM   12 dB   25 dB   SNMP Network (optional, costs additional)   Front Panel   110 / 220 VAC Auto Switching   >50 W
RF Return Loss   RF Link Gain   Control Interface   Power Supply   Power Consumption   Dimensions	6x Feedback Controlled DFB type CWDM   12 dB   25 dB   SNMP Network (optional, costs additional)   Front Panel   110 / 220 VAC Auto Switching   >50 W   19 x15 x 1.75



# F-LB61-CWDM-TxRx

## Drawing 1





# F-LB61-CWDM-TxRx

## Drawing 3

