

Single Channel Compact L-Band RF Over Fiber Link

Single fiber transport for radio signals up to 3.0 GHz fully customizable



ONE CHANNEL F-LBAND SYSTEM

The F-LBAND system from Thor Broadcast is a compact single channel kit for transporting RF signals up to 3.0 GHz over singlemode fiber optic cable. They can be used for a variety of applications involving satellite TV or communications systems. Off the shelf versions are available with optics of various power ranges in 1310 or 1550nm.

Unless otherwise stated, a standard model will be shipped with 1310nm optics. Any L-Band RF signal connected to the transmitter will be output from the receiver. However unlike coax cable, these systems only transport the signal in one direction. This makes them suitable for high security applications like optical fiber breaks.

Product Specifications and Information Table

Transmitter Parameters		Optical Input vs RF Out	
Optical Wavelength	1310nm, 1550nm (optional)	Optical Input = 0 dBm	RF Out = 88 dBμV
Optical Power Output	+2.0 dBm +/- 2 dB	Optical Input = -3 dBm	RF Out = 82 dBμV
RF Input Impedance	75Ω	Optical Input = -6 dBm	RF Out = 74 dBμV
Return loss	>13dB	Optical Input = -9 dBm	RF Out = 68 dBμV
		Optical Input = -12 dBm	RF Out = 63 dBμV
RF Frequency Response	45 - 3100 MHz	Power Consumption	
RF Input Power Range	55 - 78 dBμV	Power supply	DC 18V
RF Connector Type	F-Type, (Or by Request)	DC input voltage range	18V~24V
CNR	40 dB	Power consumption	3.5W±10%
IMD	40 dB	Environmental	
Receiver Parameters		Working temperature	-30 ~ 60°C
Optical Wavelength	1290 - 1610 nm	Relative Humidity	≤95%, no condensation
Optical Power Range	-13 dBm - 0 dBm	Storage temperature	-40 ~ 85°C
RF Frequency Response	45 - 3100 MHz	Dimentions	
RF Connector Type	F-Type, (Or by Request)	Desktop Enclosure	118mm×210mm×40mm