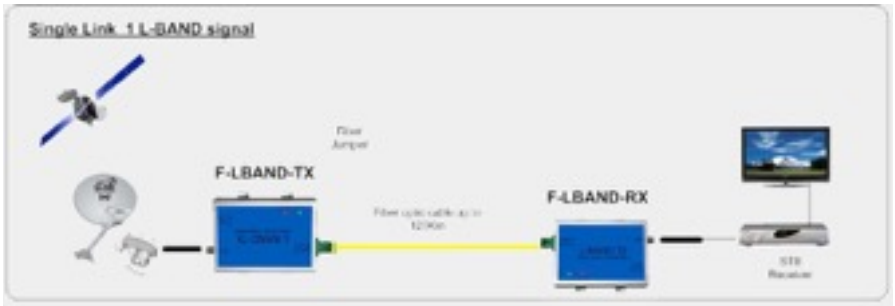
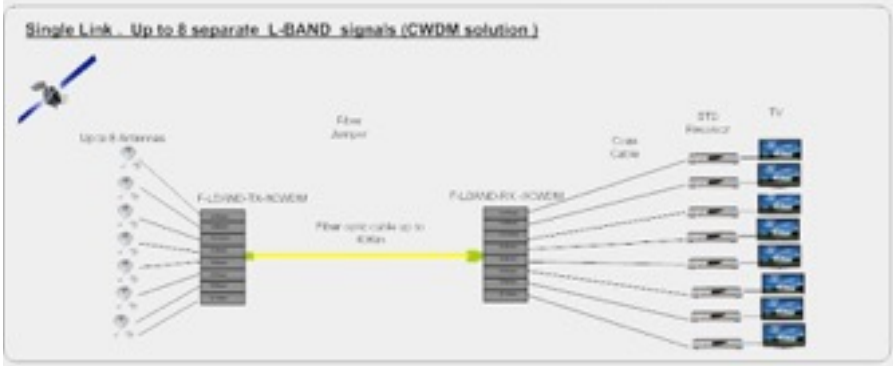
# L BAND LINK • Pass L band 5 to 3000 Mhz signals over SM fiber

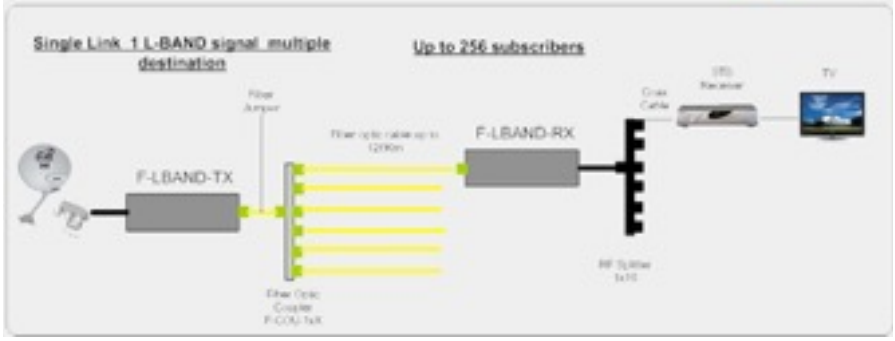
Compact L-Band RF Over Fiber Link • Use for L band downlink, L Band uplink, or ENG Microwave
SingleMode 1-fiber transport for radio signals up to 3.0 GHz fully customizable

The FSS-95F13 system is a compact transmitter & receiver set for transporting RF signals from 5 Mhz to 3.0 GHz over one singlemode fiber optic cable. This system can be used for a variety of applications involving satellite TV L-band-downlink or L-band-uplink, or other communications systems such as ENG microwave. Off the shelf versions are available with optics of various power ranges in 1310 or 1550nm. The FSS-95F13 system can be 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. Optional automatic Gain Control (AGC) is available upon request 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. DAWNco 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 DAWNco today for help with your specific L Band over fiber needs.


## Typical Satellite L-band Rx/Tx applications




## Product Features

- Use for L band downlink, L Band uplink, or ENG Microwave
- Low cost kit to transport L-Band frequencies from LNB's over fiber
- Can provide LNB power at 13/18 VDC over coax
- Can be used to remote satellite antennas up to 10 miles away
- Compatible with PLC optical splitters, point to multi point
- Prevent lightning voltage ingress into building, utilizing glass fiber cable connection to sat antenna

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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 securit y 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 | 5 - 3000 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℃ |
| Optical Wavelength | 1290 - 1610 nm | Relative Humidity | ≤95%, no condensation |
| Optical Power Range | -13 dBm - 0 dBm | Storage temperature | -40 ~ 85℃ |
| RF Frequency Response | 5 - 3000 MHz | **Dimentions** | |
| RF Connector Type | F-Type, (Or by Request) | Desktop Enclosure | 118mm×210mm×40mm |

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