

Duplex RF to Fiber Optic Transceiver

Model FOT-1



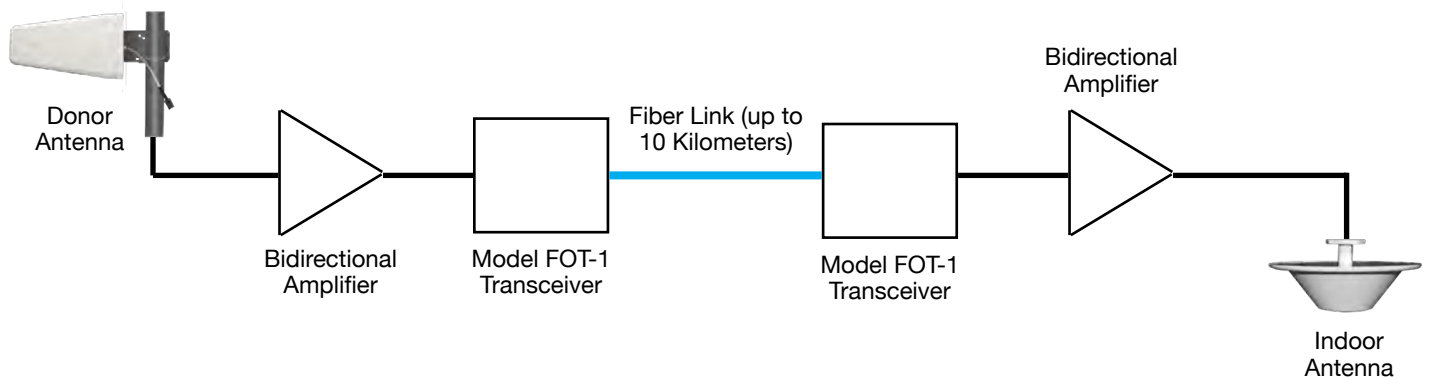
- Uses a single optical fiber strand for both uplink and downlink signals
- Single mode fiber SC/APC optical interface
- Duplex RF port that can connect to any bi-directional amplifier
- Bandwidth: 10 - 2100 MHz
- Spur free dynamic range: 110 dB
- Easily integrated into any distributed antenna system
- Sold in matching pairs
- Tx / Rcv wavelengths: 1310 nm / 1550 nm
- Includes 12 VDC power supply

One of the main problems in designing DAS and cellular signal booster systems is overcoming the loss in coaxial cable. Amplifiers have plenty of gain, but by the time the output gets to the indoor antenna the cable loss can eat up most of the signal.

Coaxial cable can be expensive and difficult to install. Fiber optic cable, in comparison, is much lower cost, easier to install and has virtually no loss.

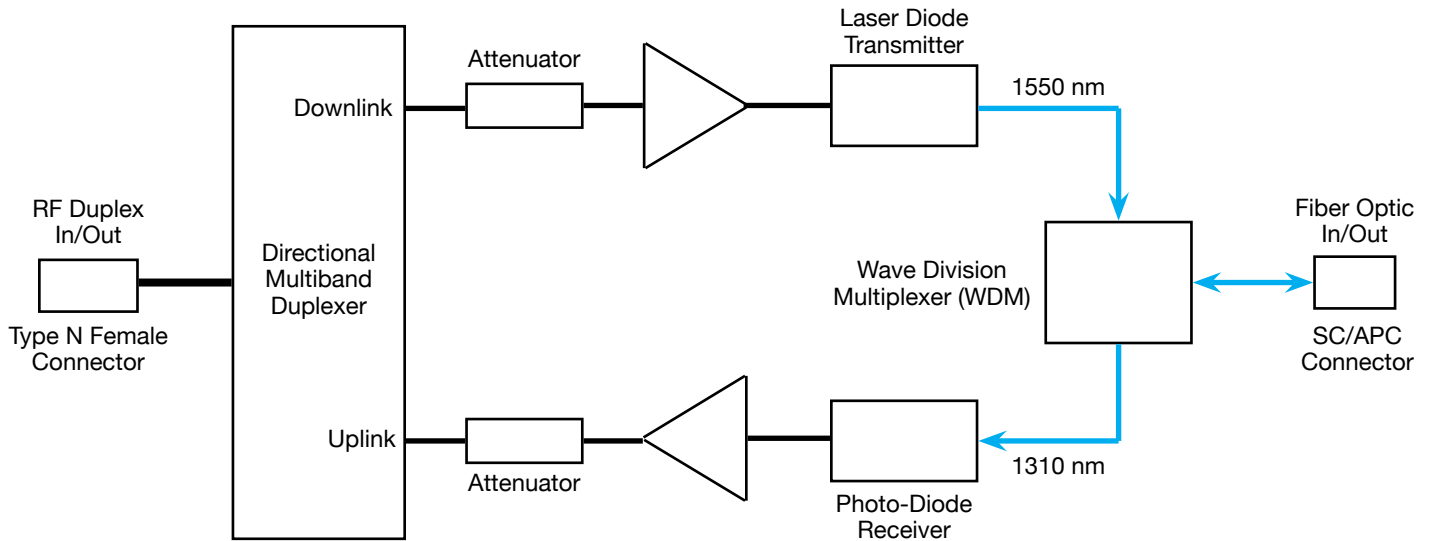
This transceiver converts RF signals to optical transmissions using Wave Division Multiplexing (WDM) that allows simultaneous transmission of uplink and downlink on a single fiber optic strand.

Typical Application



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Transceiver Block Diagram



Model FOT-1 Specifications

Power Supply	12 VDC
Power Supply Current	300 mA
Laser Optical Power	2 mW
Tx Wavelength	1310 nm
Rcv Wavelength	1550 nm
Frequency Response	700 - 2100 MHz
Spur Free Dynamic Range	110 dB
Maximum Input	30 dBm (1 Watt)
Gain / Loss	Preset between -3 to -25 dB
Fiber Optic Connector	SC/APC
RF Connector	Type N-Female
Dimensions	7.25"H x 8.1"W x 2.6"D
Mounting Method	Wall Mount
Weight	3.0 lbs
Operating Temperature Range	-40C to +75C