

# RFLL-3



LT-3-OD



PR-3-OD

## 3 GHz RF over Fiber Lightwave Link

The Optilab RFLL-3 RF over Fiber Lightwave Link is composed of a LT-3-OD lightwave transmitter and a PR-3-OD receiver unit to form a high-performance RFoF link greater than 3 GHz applications.

### Features

- RFoF Link up to 3 GHz Bandwidth
- High Dynamic Range
- CWDM laser 1310 nm or DFB
- High gain receiver with TIA post amplifier
- USB Monitor and Control Interface

### Applications

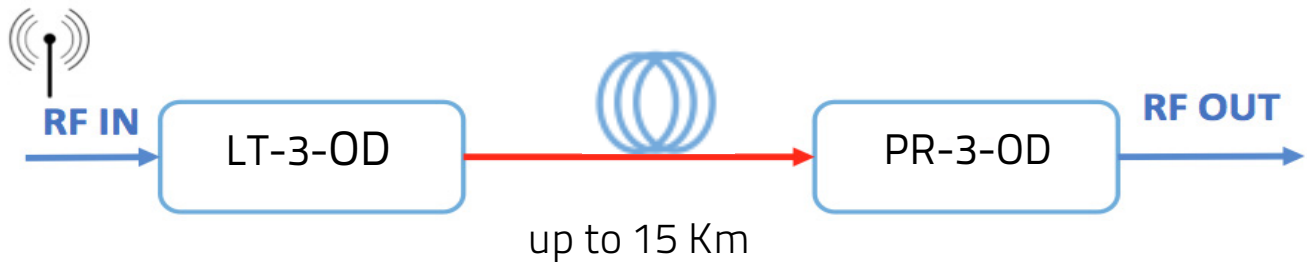
- RF Transmission over Fiber
- Low Band RF/IF Signal Distribution
- Satcom microwave antenna signal distribution
- Broadband delay-line and signal processing
- Phased and interferometric array antenna

### Link Performance Summary

Frequency	250-3500 MHz
RF Impedance Input	75 ohms
RF Return Loss	10 dB
Fiber	Single-Mode
Wavelength	1310 nm Standard, CWDM from 1270 nm to 1610 nm wavelength avail.
Link RF Gain @ 12 dB Optical Loss	-4 ±5 dB
Analog Bandwidth	3 GHz Typical
Link Gain	12 dB
FILT RF Input	+19 dBmV max.
Optical Output Power	+3 dBm
Noise Figure	≤32 dB @ 3 GHz
Optical Loss	-4 ± 5 dB
Operating Temperature	-40° C to +60° C

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## Configuration Diagram



- LT-3-OD, 3 GHz Lightwave Transmitter Module for RFoF ([Datasheet](#))**  
 The Optilab LT-3-OD is a high performance Lightwave Transmitter Module designed for analog photonics applications to 3 GHz.
- PR-3-OD, 3 GHz PhotoReceiver, Module ([Datasheet](#))**  
 The Optilab PR-3-OD is a 3 GHz bandwidth PIN photodiode receiver module, designed for RF over fiber, antenna remoting, and broadband RF signals transmission applications using single mode optical fiber.

## General Specifications

LT-3-OD	
Power Supply Requirements	110-220 VAC, 50/60 Hz, 1A max.
Fiber Connector Type	FC/APC
RF Connector	F Type
Dimensions	146.5 mm x 65 mm x 31.8 mm
PR-3-OD	
Power Supply Requirements	110-220 VAC, 50/60 Hz, 1A max.
Fiber Connector Type	FC/APC
RF Connector	F Type
Dimensions	146.5 mm x 65 mm x 31.8 mm

## CWDM Wavelengths Available

1270 nm	1450 nm
1290 nm	1470 nm
1310 nm	1490 nm
1330 nm	1510 nm
1350 nm	1530 nm
1370 nm	1550 nm
1390 nm	1570 nm
1410 nm	1590 nm
1430 nm	1610 nm

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