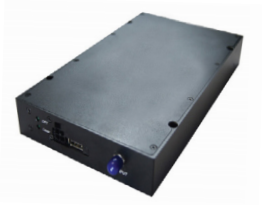
RFLL-20-L



LTA-20-M

PD-30-M

20 GHz RF over Fiber Lightwave Link

The Optilab RFLL-20-L RF over Fiber Lightwave Link is composed of a LTA-20-M lightwave transmitter module and a PD-30-M receiver to form a high-performance RFoF link for up to 20 GHz applications.

Features

- RFoF Link with 20 GHz Bandwidth
- High Dynamic Range
- Low Noise Figure
- High linearity Receiver
- USB Monitor and Control Interface

Applications

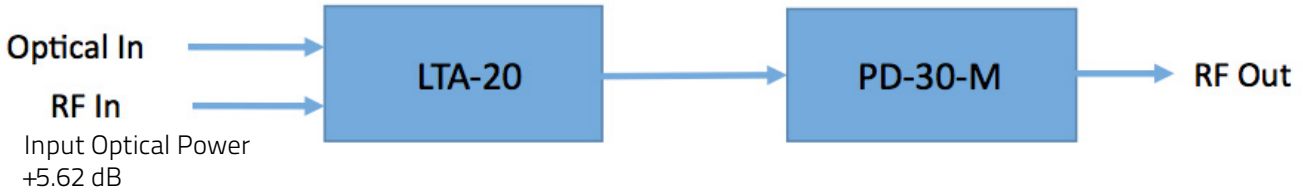
- RF to 20 GHzTransmission over Fiber
- RF/IF Signal Distribution
- Satcom microwave antenna signal distribution
- Broadband delay-line and signal processing
- Phased and interferometric array antenna

Link Performance Summary

Analog Bandwidth	25 GHz
Link Gain Vs Bandwidth	-34 dB @ 17 GHz Typical -37 dB @ 22 GHz Typical
Input 1dB Comp	12.4 dBm @ 1 GHz
Gain Flatness	+/- 1.5 dB
Noise Figure	36 dB @10 GHz 37 dB @ 20 GHz
Group Delay	+/- 26 ps

20 GHz RF over Fiber Lightwave Link

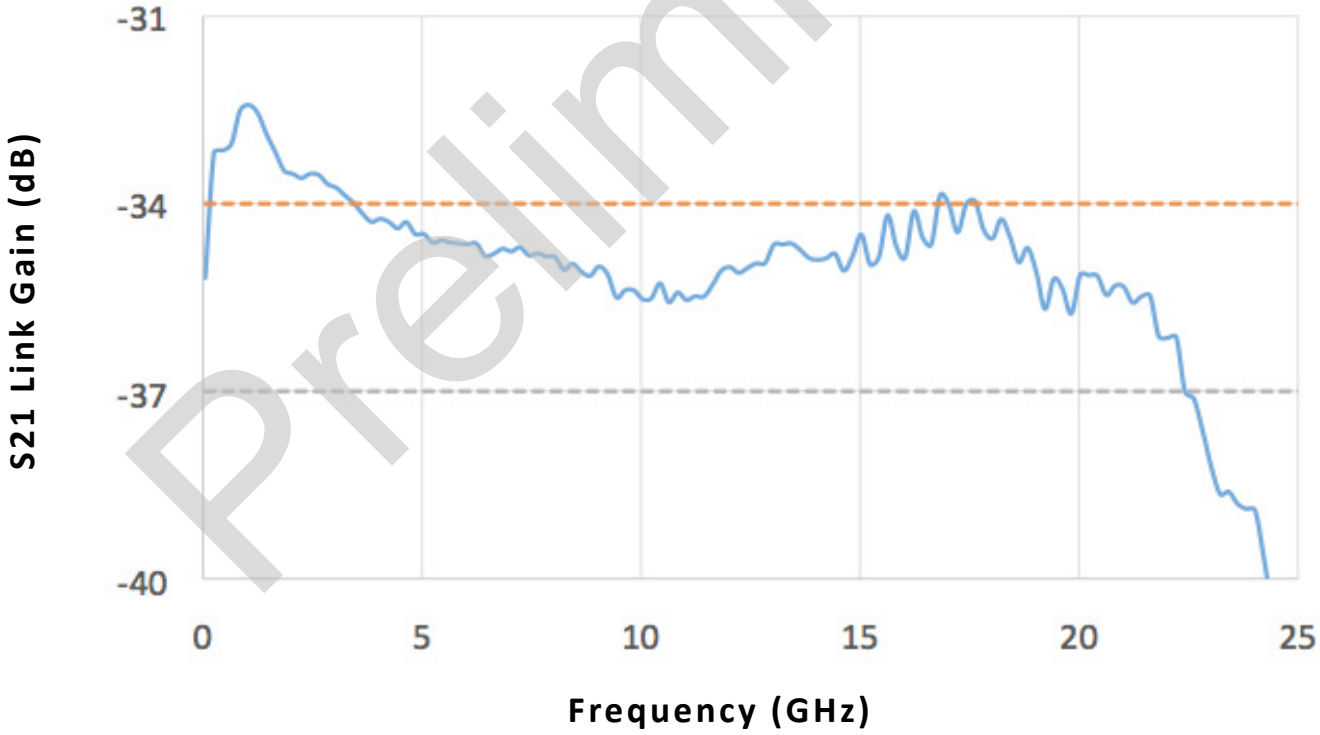
Configuration Diagram



- **LTA-20-M**, 20 GHz Lightwave Transmitter Module for RFoF (**Datasheet**)
  The high performance Lightwave Transmitter Module designed for analog photonics applications from DC to 20 GHz.

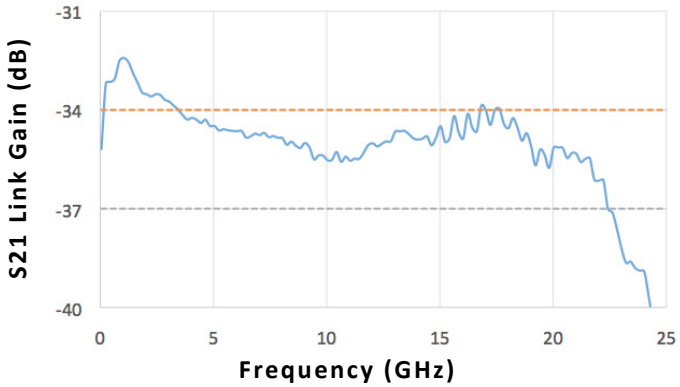
- **PD-30-M,** 30 GHz Linear InGaAs PIN Photodetector, Module (**Datasheet**)
  The bandwidth PIN receiver module designed for RF over Fiber, antenna remoting, and broadband RF transmission applications.

Link Gain

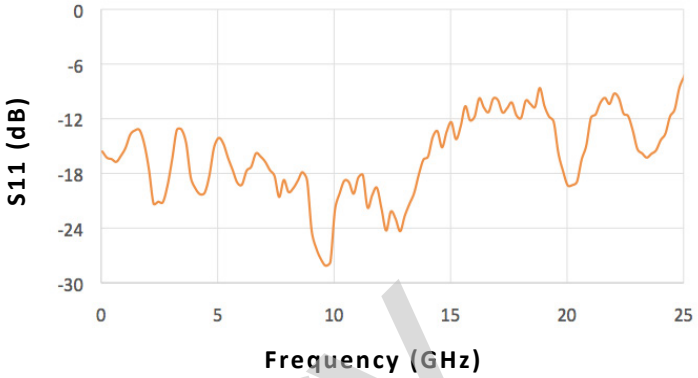


20 GHz RF over Fiber Lightwave Link

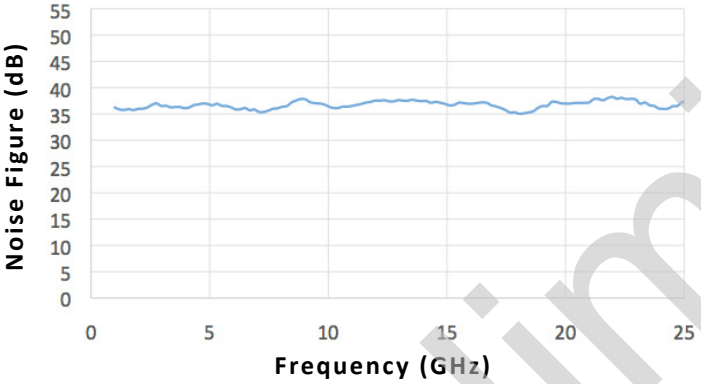
S21 Bandwidth



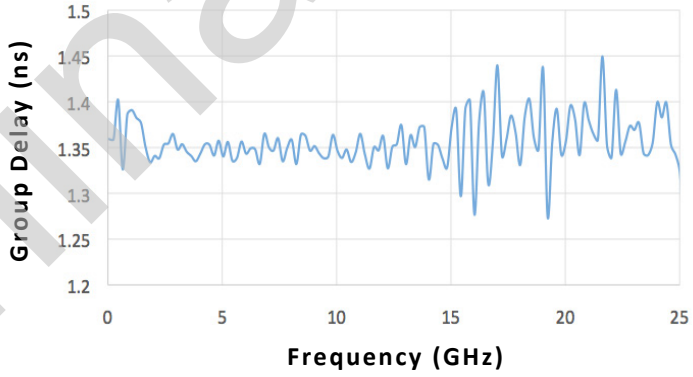
S11 Response



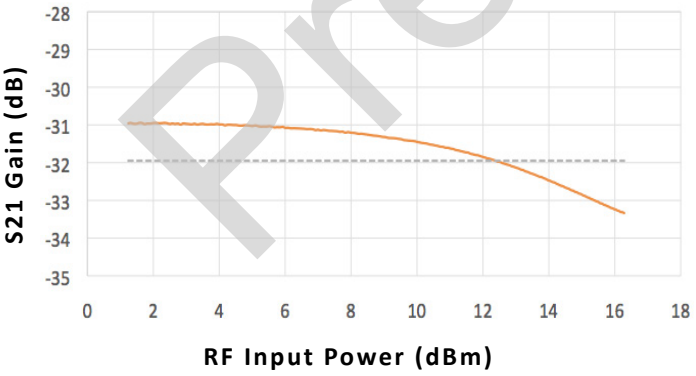
Noise Figure



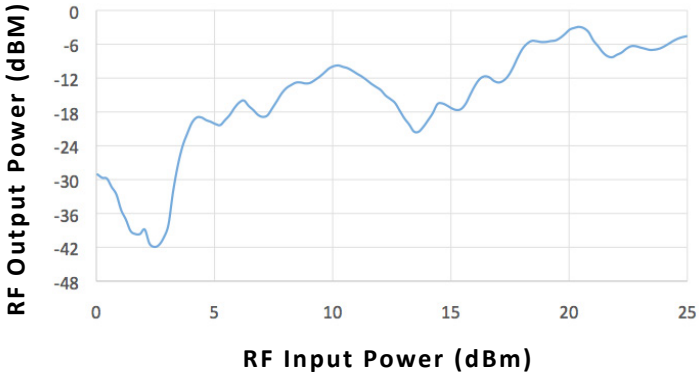
Group Delay



1 dB Compression



S22 Electrical



20 GHz RF over Fiber Lightwave Link

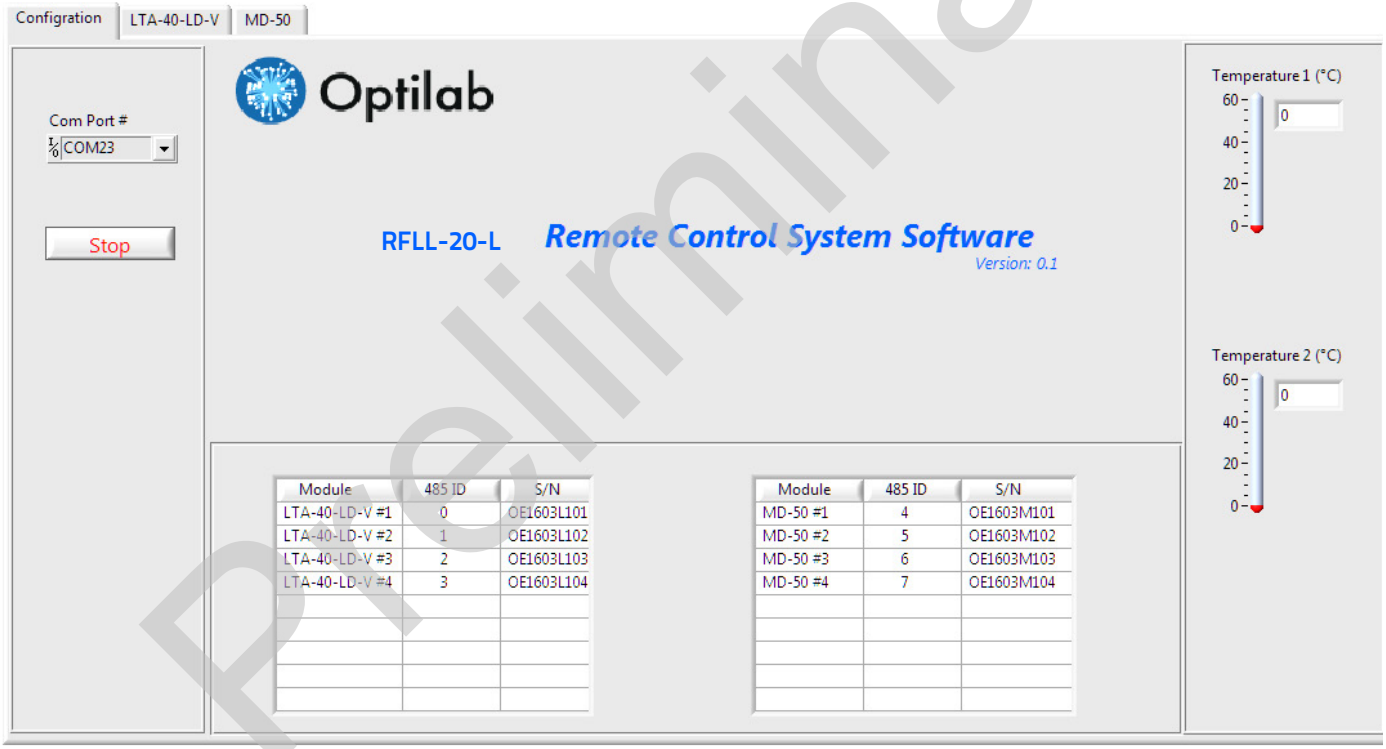
LTA-20-M		PD-30-M	
Power Supply Requirements	±5V, 1A typ.	Power Supply Requirements	+5 V DC, 500 mA max.
Dimensions	206 mm x 102.4 mm x 31.5 mm	Dimensions	82 mm x 60 mm x 26.5 mm
Accessories	PS-5 & Cables	Accessories	USB adaptor & Cables

RF Specifications

S11 Reflection	From DC to 15 GHz <-12 dB From 15 GHz to 25 GHz <-7 dB	**S22 Reflection**	From DC to 17 GHz < -10 dB From 17 GHz to 25 GHz < -3 dB

Control Software

A LabView™ based control software is used to set the RF over Fiber system parameters and monitors system performance.



WEB ORDER

To order, please click below.

OEQuest.com

For technical info and support:

sales@optilab.com