



PluraLight

high density fiber optic communications platform

Linear Photonics' PluraLight Rack Subsystems provide high density, high reliability, interchangeable interfacility communications links in a standard 3RU chassis.

16 MODULES IN 19" 3RU PLATFORM

FIBER OPTIC TRANSCEIVERS

WDM MUX AND DEMUX NETWORKS

DUAL REDUNDANT POWER SUPPLIES

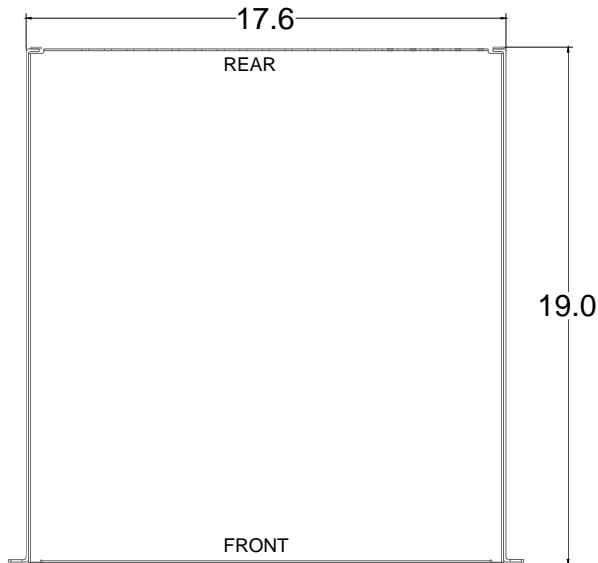
FULLY HOT-SWAPPABLE

A 3RU Chassis allows up to sixteen single-wide fiber optic communications link plug-ins. These include TRIMOD 4 GHz Fiber Optic transceivers, WDM MUX and DeMUX modules, Add/Drop modules and various fiber optic communications transmitter and receiver modules. The Chassis also includes dual-redundant AC power supplies. All link modules are hot-swappable for plug-and-play operation.

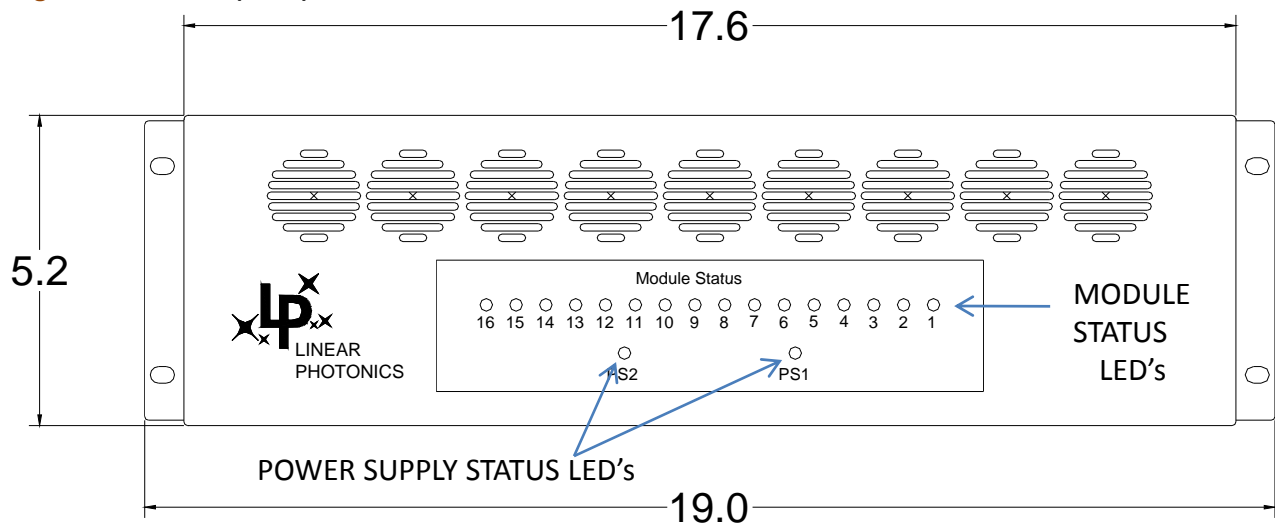
Applications include signal and antenna remoting, optical and electro-optical communications, radar and information processing.



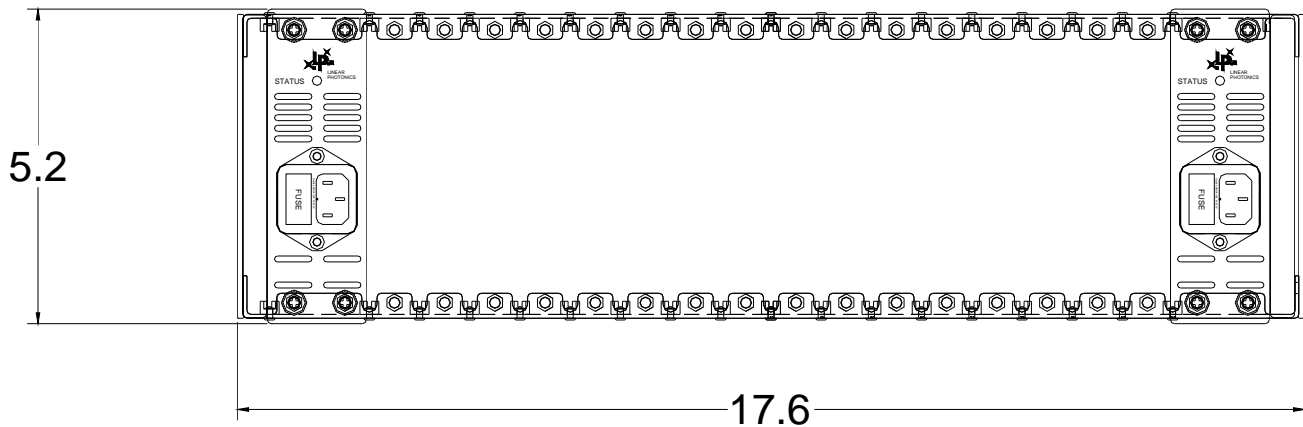
■ PluraLight RACK TOP (INCH)



■ PluraLight RACK FRONT (INCH,



■ PluraLight RACK REAR (INCH)



■ **PluraLight RACK CHASSIS SPECIFICATION**

AC Input	95 - 260 V 50/60 Hz 3 A fused
Dimensions w x l x h inch(cm)	19.0 x 19.0 x 5.2 (48.3 x 48.3 x 13.2)
Front Panel Indicators	Right/Left Power Supply LEDs 16 Individual Plug-in Status LEDs
Empty Weight	12.5 lb (5.7 kg) including dual power supplies
Capacity	16 slots

■ **STANDARD REAR-ACCESIBLE PluraLight CHASSIS**



■ **PluraLight PLUG-IN OPTIONS (refer to individual plug-in datasheets for more information)**

Module	Description	Model
TRIMOD-Dual RF	TRIMOD Transceiver, Dual Optical/Dual RF, up to 4 GHz	TRIMOD-D/SL
TRIMOD-BiDi RF	TRIMOD Transceiver, Dual Optical/Bidirectional RF, up to 4 GHz	TRIMOS-BD/SL
WDM-1310/1550	1310/1550 WDM MUX/DEMUX	PL-WDM-1310/1550
WDM-1550/1625	1550/1625 WDM MUX/DEMUX	PL-WDM-1550/1625

Custom options are available. Call LPL.

■ **PluraLight PART NUMBER INFORMATION**

Part Number	Description
LPTR16	3RU Rack Chassis with Installed Dual Power Supplies
PluraLight-16	3RU Rack Chassis
LPTR16-NB	Passive Chassis (for Passive Plug-ins only)
PluraLight-PS	Power Supply Module
PL-PS-BP	Power Supply Blank Panel
PL-SW-B	Plug-in Blank Panel



PluraLight-PS

power supply



PluraLight Power Supplies provide prime power for all PluraLight Rack equipment and plug-in modules.

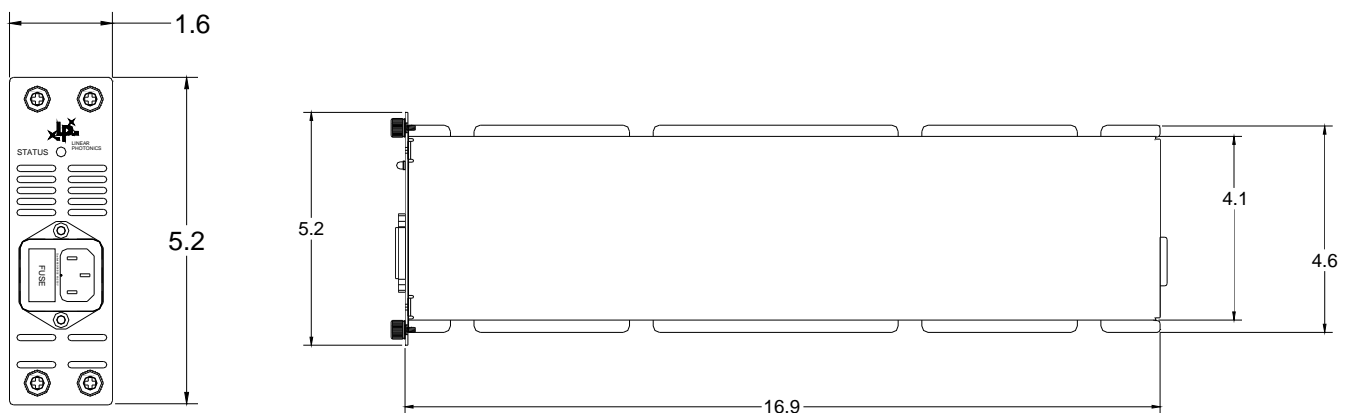
Each Power Supply is designed to provide power for full capacity to the chassis. Two supplies can be installed, providing automatic redundant backup in case of failure.

Standard PluraLight racks (PL16) are delivered complete with dual power supplies installed.

■ PluraLight-PS SPECIFICATION

AC Input	95 - 260 V 50/60 Hz 3 A fused
AC Line Fuse	5x20 mm 3A T-LAG
STATUS LED	Dual Color (RED=ALARM, GREEN=OK)
Power	90 Watts Maximum at full rack capacity

■ PluraLight-PS OUTLINE (INCH)





PluraLight-TRIMOD

TRIMOD transceiver plug-in modules

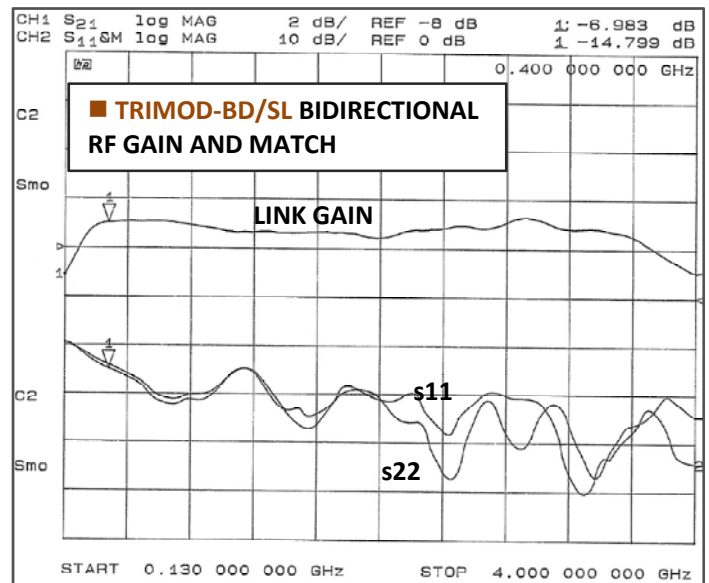
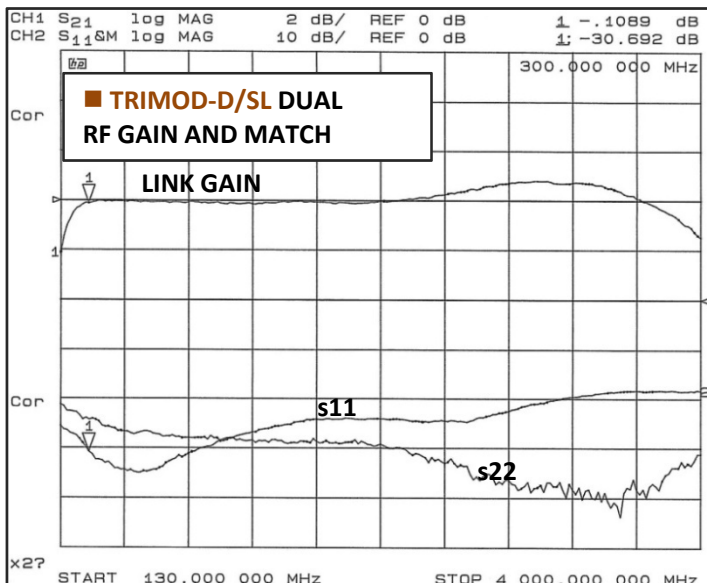


LPL TRIMOD series Fiber Optic Transceivers are available as single-wide plug-ins in the PluraLight 3RU platform. The modules can provide full duplex bi-directional communications from 300 to 4000 MHz.

Plug-ins are available as Dual RF or Full BiDirectional (single RF connector). A dual-LC/PC optical connector provides compact and reliable fiber connection. All plug-ins are hot-swappable.

Single wide PluraLight plug-ins allow up to 16 modules per Chassis.

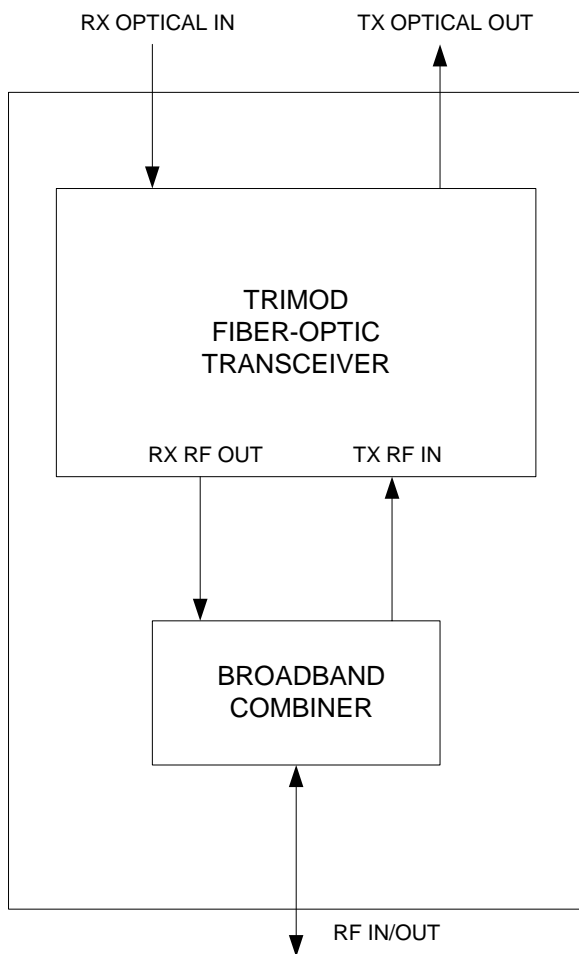
■ Plura-Light-TRIMOD PERFORMANCE



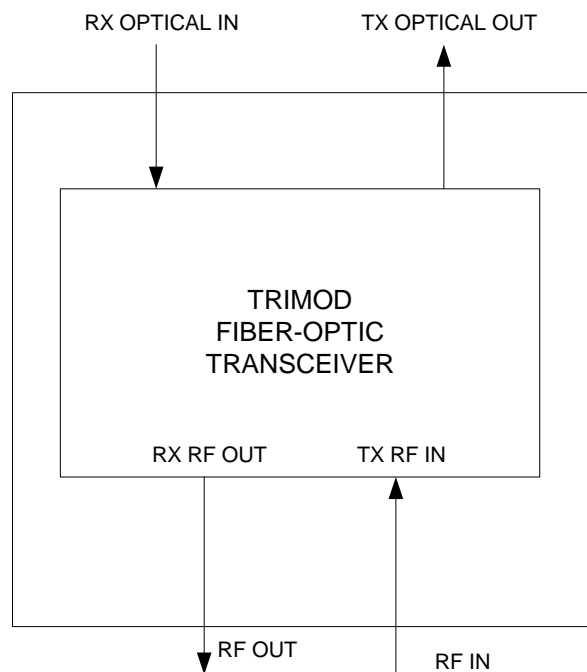
■ **PluraLight TRIMOD Plug-in LINK SPECIFICATIONS (1 km link)**

Parameter	TRIMOD-BD/SL	TRIMOD-D/SL	Units
Frequency Bandwidth	500 to 4000	200 to 4000	MHz
RF Link Gain at 1500 MHz	-7 ±2	0 ±2	dB
RF Gain Variation over Frequency	±2	±2	dB
RF Input Compression	0	0	dBm
RF Input/Output Return Loss (50 Ω)	15	15	dB
Transmit-Receive Isolation	N/A	40	dB
RF Connector	SMA female	SMA female (x2)	
Optical Connector	Dual LC/PC	Dual LC/PC	
Status LED	GRN: OK; RED: Alarm	GRN: OK; RED: Alarm	
Weight	2.2 lb (1.0 kg)	2.2 lb (1.0 kg)	

■ **TRIMOD-BD/SL BiDirectional RF Block Diagram**



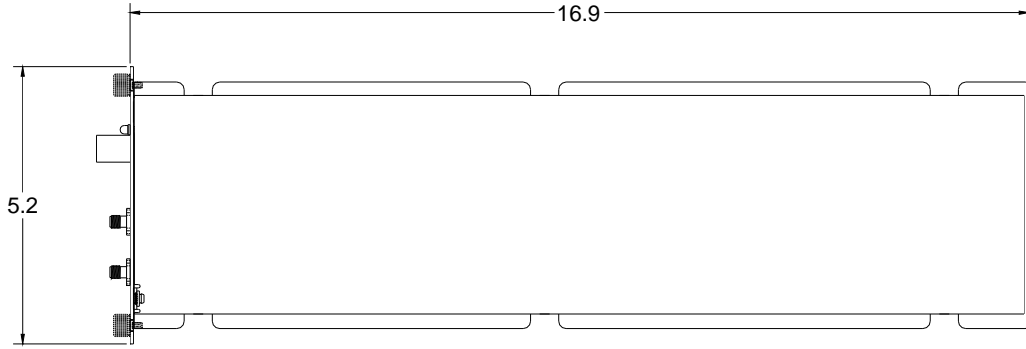
■ **TRIMOD-BD/SL DUAL RF Block Diagram**



The TRIMOD BD/SL Plug-in combines the RF signals in a passive broadband combiner. The RF port provides both forward and return signals. It is intended for Simplex Bi-Directional applications using two fibers and a single RF connection.

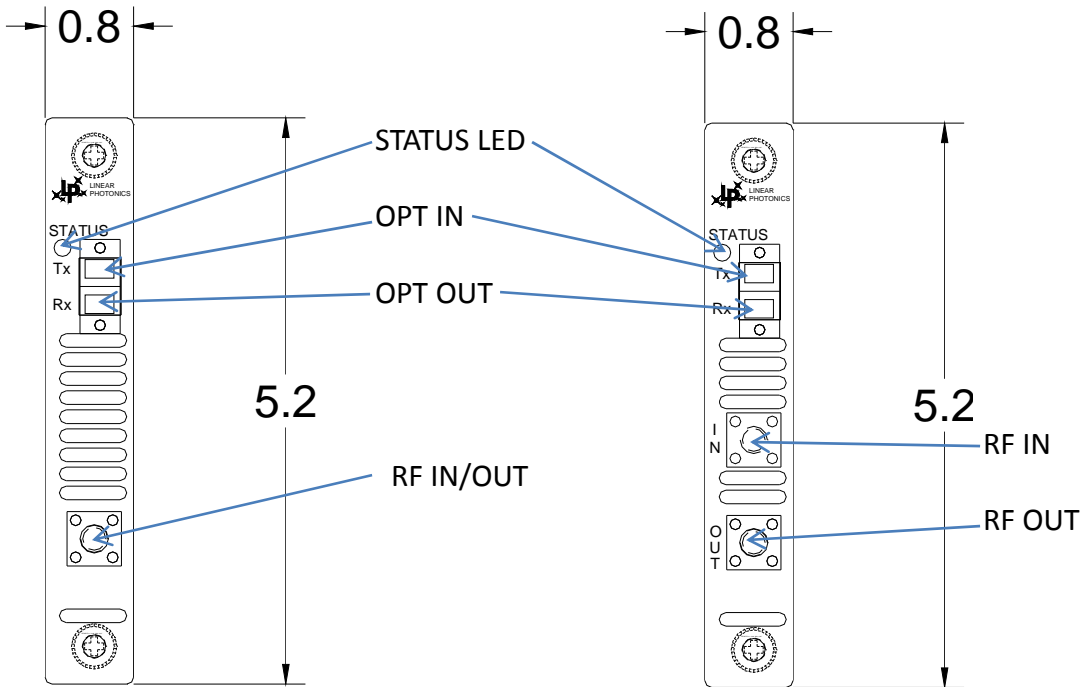
The TRIMOD-D/SL Plug-in is intended for Full-Duplex Bi-Directional communications over separate and isolated RF and optical paths.

■ PluraLight-TRIMOD TOP OUTLINE (INCH)



■ TRIMOD-BD/SL FRONT (INCH)

■ TRIMOD-D/SL FRONT (INCH)



■ PluraLight-TRIMOD PART NUMBER INFORMATION

TRIMOD-xxxx-BD/SL	Bi-Directional RF TRIMOD Plug-in
TRIMOD-xxxx-D/SL	Dual RF TRIMOD Plug-in

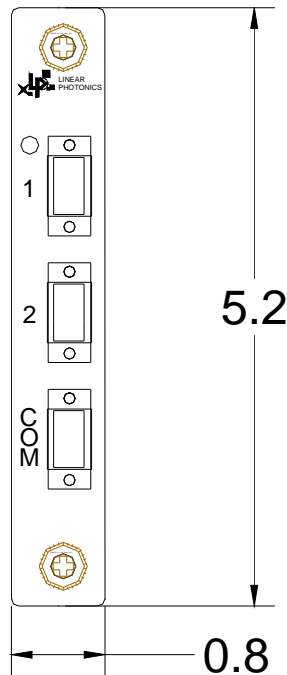
xxxx is Wavelength; 1310 or 1550 (1310 standard)

Custom options are available. Call LPL.



PluraLight-WDM

wdm plug-in modules



LPL provides passive WDM modules in the PluraLight platform. One high-density PluaLight 3RU chassis can accommodate up to 16 WDM modules. Passive Modules can be installed into active (LPTR-16) or Passive (LPTR-16-NB) Chassis.

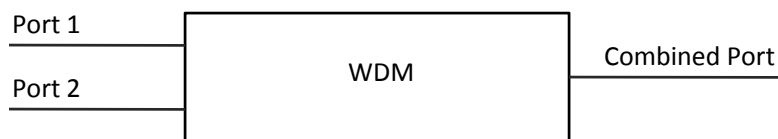
WDM modules are available in many standard and custom configurations, including 1310/1550, 1550/1625, and C- and L-Band ITU channelization.

Applications include CWDM, DWDM, add-drop and real-time OTDR.

Custom options are available. Call LPL.

■ PluraLight WDM STANDARD MODULES AND SPECIFICATIONS

Parameter	PL-WDM-1310/1550	PL-WDM-1550/1625	Units
Port 1 Wavelength	1530 to 1565	1530 to 1565	nm
Port 2 Wavelength	1290 to 1320	1610 to 1640	nm
Insertion Loss to Combined Port	1	1	dB
Isolation	20	20	dB
Directivity	40	40	dB
Optical Return Loss	35	35	dB
Optical Connectors	SC/APC	SC/APC	



Insertion Loss: Maximum Loss of desired signal from Port 1 or Port 2 to Combined Port

Directivity: Minimum Loss of undesired signal from Combined Port to Port 1 or Port 2

Isolation: Minimum Loss from Port 1 to Port 2