

## 8 CHANNEL DWDM MUX/DMX, +1310NM

### **OVERVIEW**

The 8 channel DWDM + 1310nm filter and Expansion port provides a solid capacity solution for modern fiber networks. This LGX module combines 8 ITU standard DWDM wavelengths and a wideband 1310nm port to allow the overlay of legacy 1310nm circuits or the next evolution of 100G circuits. The included Expansion port provides additional growth up to 40 DWDM channels without interrupting the initially deployed circuits.

DWDM capacity solutions are passive and require no power, or configuration. DWDM filters are used to allow the combination (Multiplexing) and separation (Demultiplexing) of multiple wavelengths over single mode fiber and provide a high quality, low loss, fiber capacity solution.

Plugin Optics LGX mounting solutions support controlled environment and I-Temp deployments.





### **FEATURES**

8 Channel DWDM +1310nm Configuration: Mux/Dmx 5 Variants: ITU Ch 20-59 2% Monitor Port Form Factor: LGX Temp Range: I-Temp

### **ENVIRONMENT**

Central Office Headend Remote Site Cabinet Pedestal

### **CONFIGURATIONS**

Point to Point Linear Chain Collapsed/Diverse Ring



PARAMETER	UNIT		SPECIFICATION	
NUMBER OF CHANNELS	СН		8 DWDM, +1310nm, EXPANSION PORT	
OPERATING WAVELENGTH	nm		1260-1360, 1520-1570	
DWDM CHANNEL SPACING	GHz		100	
PASSBAND: 1310NM PORT	Nm		1260-1360	
PASSBAND: EXPANSION PORT	nm		1520-1570	
PASSBAND: DWDM CHANNELS	nm		ITU ± .11	
INSERTION LOSS			DEMUX	MUX
1310NM LOSS, COM TO 1310	MAX.	dB	1.4	1.4
EXPANSION PORT, EXP TO COM	MAX.	dB	3.2	3.2
DWDM CHANNELS LOSS	MAX.	dB	3.4	3.4
MONITOR	MAX.	dB	19	22.3
ADJACENT AND 1310 CHANNEL ISOLATION	MAX. dB		30	
NON-ADJACENT CHANNEL ISOLATION	MAX. dB		40	
PASS BAND RIPPLE / DWDM	MAX.	dB	В 0.5	
PDL/DWDM	MAX.	dB 0.2		
PMD	MAX.	Ps	0.2	
DIRECTIVITY	MIN.	dB	50	
RETURN LOSS	MIN.	dB	45	
POWER HANDLING	MAX. mW		300	
DIMENSIONS (H X W): FACEPLATE	mm		28.8 x 130	
DIMENSIONS (H X W X D): LGX BOX	mm		28.8 x 100 x 76.2	
DIMENSIONS: NYLATCH SPACING	mm		118	
OPERATING TEMPERATURE	°C		-40 ~ +85	
STORAGE TEMPERATURE	°C		-40 ~ +85	
FIBER TYPE	/		SMF 28	
CONNECTOR TYPE	/		LC/UPC	

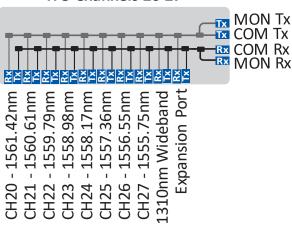
WWW.PLUGINOPTICS.COM Doc. No. 142-D8v2.2, Aug 2024



## **LOGICAL DIAGRAM**

The logical diagram shows how the channels flow through the filter. In a Mux/Demux channel ports will terminate or originate from the COM fibers and only channels listed are accessible. This filter includes a 1310nm wideband port that will filter channels between 1260nm & 1360nm to allow for the transport of legacy 1310nm channels or even 100Gbps channels using wavelengths in that range. Also included on this filter are an expansion port that will allow wavelengths between 1520nm & 1570nm (Excluding the channels listed on the filter) to allow for the cascading DWDM filters or any channels with wavelengths that fall in that range. This logical diagram shows a 8 channel Mux/Demux (ITU Channels 20- 27) filter.





ORDERING INFORMATION		
PART NUMBER	DESCRIPTION	
PLO-L2DT-B9C1-LC	LGX, 8 CHANNEL DWDM +1310 +EXP, MUX-DEMUX, ITIU C21-C27, 1561.42 - 1555.75, 2% MONITOR, LC-UPC	
PLO-L2DT-B9C2-LC	LGX, 8 CHANNEL DWDM +1310 +EXP, MUX-DEMUX, ITU C28-C35, 1554.94 - 1549.32, 2% MONITOR, LC-UPC	
PLO-L2DT-B9C3-LC	LGX, 8 CHANNEL DWDM +1310 +EXP, MUX-DEMUX, ITU C36-C43, 1548.51 - 1542.94, 2% MONITOR, LC-UPC	
PLO-L2DT-B9C4-LC	LGX, 8 CHANNEL DWDM +1310 +EXP, MUX-DEMUX, ITU C44-51, 1542.14 - 1536.61, 2% MONITOR, LC-UPC	
PLO-L2DT-B9C5-LC	LGX, 8 CHANNEL DWDM +1310 +EXP, MUX-DEMUX, ITU C52-C59, 1535.82 - 1530.33, 2% MONITOR, LC-UPC	
NOTE: SEE PLUGIN OPTICS LGX N	MOUNTING CHASSIS BELOW.	

WWW.PLUGINOPTICS.COM Doc. No. 142-D8v2.2, Aug 2024



#### LGX MOUNTING CHASSIS

### **OVERVIEW**

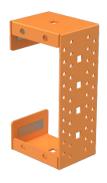
Plugin Optics offers carrier grade, cost effective mounting solutions for LGX module deployments.

# LGX Mount, 2-Slot "Universal Magnet Mount" Part#: PLO-0RU-UMC-2LGX

Designed for rack space limited deployments, for example pedestals, cabinets or MDU environments where rack space may not be available. The Universal Magnet Mount can be magnet mounted to the steel walls or screwed directly into a wall board. This chassis will hold two LGX modules.

#### **FEATURES:**

- 2 LGX slots
- Magnet or Wall Mount



# LGX Chassis, 1RU, 3-Slot "Universal 1RU Chassis" Part#: PLO-1RU-LMC-3LGX

Designed for 1RU rack deployments, for example Central Office, Head End, Data Center, Cabinet and MDU. The Universal 1RU Chassis has reversible mounting brackets and can be mounted in 19" or 23" racks. The chassis has integrated fiber management and will hold three LGX modules.

#### **FEATURES:**

- 1RU, 3 LGX slots
- 19" or 23" racks
- Integrated fiber management



# LGX Chassis, 3RU, 14-Slot "Universal 3RU Chassis" Part#: PLO-3RU-LMC-14LGX

Designed for 3RU deployments, for example Central Office, Head End and Data Center. The Universal 3RU Chassis has reversible mounting brackets and can be mounted in 19" or 23" racks. The chassis has integrated fiber management and will hold fourteen LGX modules.

### **FEATURES:**

- 3RU- 14 LGX slots
- 19" or 23" racks
- Integrated fiber management

