

# Coarse Wavelength Division Multiplexer (4/8/16/18ch)



ACP's Coarse wavelength division multiplexer (CWDM) utilizes thin film coating technology and proprietary design of non-flux metal bonding micro optics packaging. It provides low insertion loss, high channel isolation, wide pass band, low temperature sensitivity and epoxy free optical path.

## PERFORMANCE SPECIFICATIONS

Parameter	Specifications			
	Mux/Demux			
Operating Wavelength	1270 ~ 1610 nm			
Center Wavelength (CWL)	1270, 1290, .....1610nm or 1271, 1291, .....1611nm			
Center Wavelength (CWL) Accuracy	±0.5nm			
Minimum Channel Spacing	20nm			
Channel Passband (@-0.5dB bandwidth)	≥ 13nm			
Number of Channels	4	8	16	18
Insertion Loss (Channel ports)	≤ 1.4dB	≤ 2.2dB	≤ 3.5dB	≤ 4.0dB
Insertion Loss (UPG port)	≤ 1.3dB <sup>1)</sup>	≤ 2.0dB <sup>1)</sup>	≤ 2.6dB <sup>1)</sup>	NA <sup>2)</sup>
Channel Uniformity	≤ 0.6dB	≤ 1.0dB	≤ 1.0dB	≤ 1.0dB
Channel Ripple	≤ 0.3dB	≤ 0.3dB	≤ 0.5dB	≤ 0.5dB
1% TAP Port Loss	20.4dB			
Channel Isolation @Add/Drop (Demux only)	≥ 30dB (Adjacent)			
	≥ 40dB (Non-adjacent)			
Insertion Loss Temperature Sensitivity	≤ 0.003dB/°C			
Wavelength Temperature Shifting	≤ 0.002nm/°C			
Polarization Dependent Loss	≤ 0.10dB			
Polarization Mode Dispersion	≤ 0.10ps			
Directivity	≥ 50dB			
Return Loss	≥ 45dB			
Optical Power	≤ 300mW			
Operating Temperature	-20 to +70°C (Extended temperatures are also available upon request)			
Storage Temperature	- 40 to +85°C			
Package Dimensions (LxWxH)	S= 89x51x8.0mm case (4 Ch)			
	F= 96x78x8mm case (4/8 Ch)			
	G=96x78x13mm case (16/18 Ch)			
	L1=Single LGX Box (4/8 Ch, Maximum 16 Ch with LC)			
	L2=Double LGX Box			
	R1=19" Rack (1RU)			

## FEATURES

- Low Insertion Loss
- Wide Pass Band
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path

## APPLICATION

- Line Monitoring
- WDM Network
- Telecommunication
- Cellular Application
- Fiber Optical Amplifier
- Access Network

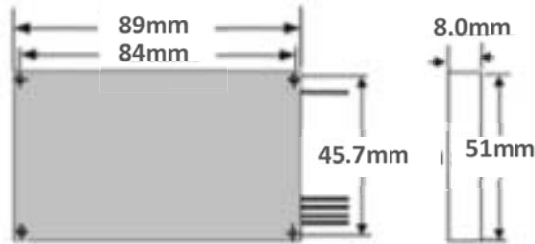
Note:

- 1) UPG: port upgrade for future expansion.
  - 2) No upgrade port at 18 channels.
- All values referenced are without connector.

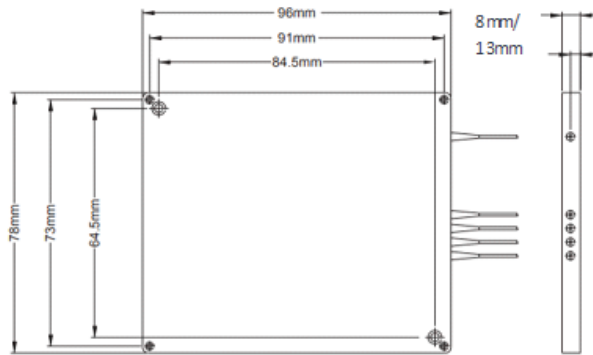
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### MECHANICAL DIMENSIONS

S package:

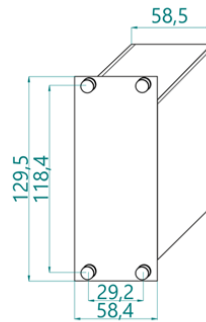
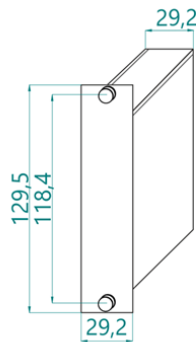


F/G package:

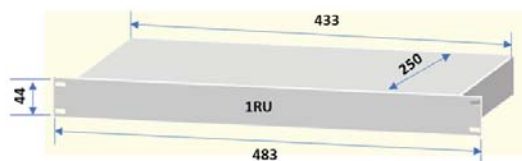


Single LGX Box

Double LGX Box

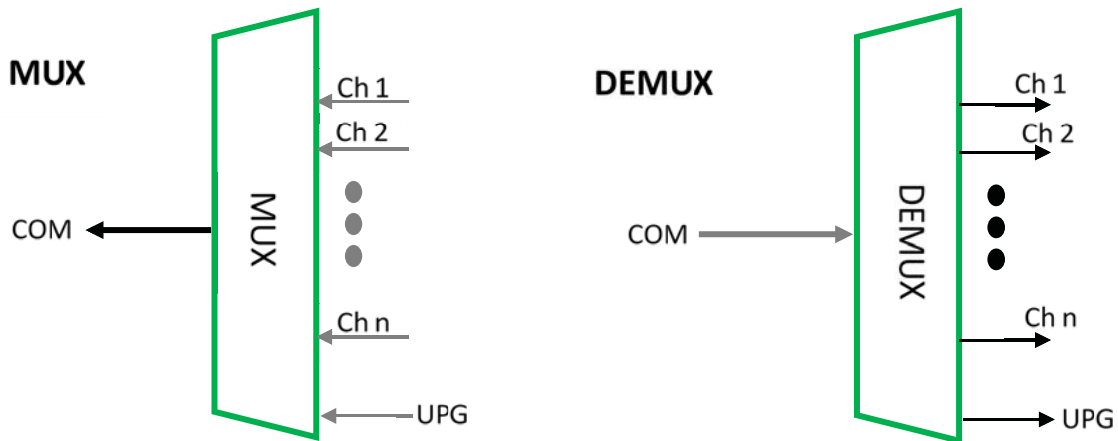


19" Rack:



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### CHANNEL CONFIGURATIONS



### ORDERING INFORMATION

CWDM	Channel Spacing*	Number of Channels	Configuration	1st Channel Wavelength	Package	Fiber Type**	Fiber Length	Pigtail Style	Connector	Option
	1=10nm	04=4 Channels	M=Mux	270= 1270 nm	S=S package	None=L1,L2&R1 Package	None=L1,L2&R1 Package	None=L1,L2&R1 Package	0=None	None=Standard
	2=20nm	08=8 Channels	D=Demux	271=1271 nm	F= F package				1=FC/APC	U0=UPG
	4=4nm	•	•	•	G= G package	2=SMF-28 Ultra (G.657.A1)	05=0.5m 10=1.0m	1=Bare fiber 2=900um loose tube	2=FC/PC 3=SC/APC 4=SC/PC	U1=1%+UPG
		18=18 Channels		610 = 1610nm 611 = 1611nm	R1=19"1RU	3=ClearCurve ZBL(G.657.B3)	• • 20=2.0m	3=3mm jacket 4=2mm jacket 5=1.6mm jacket	5=ST 6=LC/UPC 7=LC/APC	

\*custom order for 10nm and 4nm channel spacing.

\*\*1=SMF-28(G.652) is available upon request.