

# 100 GHz 8-Channel Dense Wavelength Division Multiplexer

## DWDM-18 Series



### Features

- 100 GHz Channel Spacing
- High Channel Isolation
- Low Insertion Loss
- Highly Stable & Reliable
- Epoxy-Free Optical Path
- Low Profile Packaging

### Applications

- Dense WDM Systems
- CATV fiber optic Links
- Fiber Amplifier System
- Fiber optic Instruments
- Sensors

OPLINK dense wavelength division multiplexers (DWDM) are based on thin film filter technology and metal bonding micro optics packaging. This proven technology offers very wide channel bandwidth, flexible channel configuration, low insertion loss and high isolation. The flexibility in channel configuration allows capacity upgrade as your system grows. OPLINK DWDMs are modular units designed for easy upgrade. All OPLINK products are epoxy-free in the optical path. It is used in high power applications in DWDM systems. OPLINK DWDM devices are Bellcore GR -1221 qualification tested.

### Performance Specifications

DWDM-18 Series	Multiplexer	De-Multiplexer
Center Wavelength (nm)	1550 nm Window, ITU 100 GHz Grid (8 channels)	
Center Wavelength Accuracy (nm)	$\leq \pm 0.1$	
Channel Spacing (GHz)	100 (0.8 nm)	
Channel Passband (-0.5 dB Bandwidth) (nm)	$\geq 0.2$	
Insertion Loss (dB)	$\leq 5.0$	
Insertion Loss uniformity (dB)	$\leq 1.5$	
Passband Ripple (dB)	$\leq 1.0$	
Adjacent Channel Isolation (dB)	$\geq 10$	$\geq 25$
Non-adjacent Channel Isolation (dB)	N/A	$\geq 35$
Insertion Loss Temperature Sensitivity (dB/ $^{\circ}$ C)	$\leq 0.005$	
Wavelength Temperature Sensitivity(nm/ $^{\circ}$ C)	$\leq 0.001$	
Return Loss (dB)	$\geq 45$	
Polarization Dependent Loss (PDL) (dB)	$\leq 0.2$	
Polarization Mode Dispersion (ps)	$\leq 0.1$	
Maximum Power Handling (mW)	300	
Maximum Tensile Load (N)	5	
Operating Temperature ( $^{\circ}$ C)	0 to +65	
Storage Temperature ( $^{\circ}$ C)	-40 to +85	
Package Dimension (mm)	P1: (L)125 x (W) 90 x (H) 8	

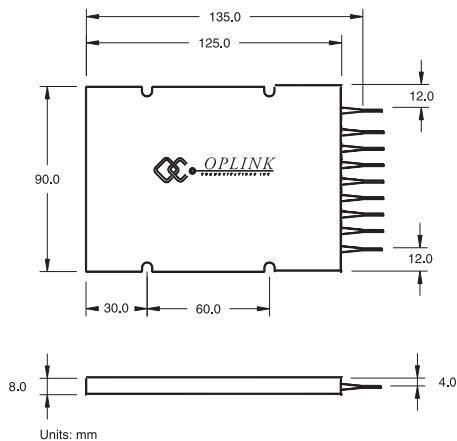
Values are referenced without connector loss.

## Ordering Information

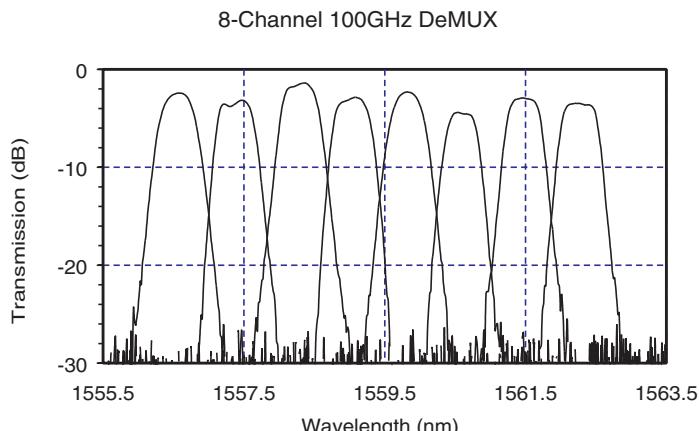
Standard Oplink Dense WDMs are specified below with appropriate part number options. If you require devices that are different than these standard devices, please contact our local Oplink Distributor, Sales Representative, or Factory Customer Service for ordering and price information.

DWDM	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>	Please specify center wavelengths	
<b>Channel Spacing:</b>	8-ch								
100 GHz = 1									
<b>Configuration:</b>	MUX = M DEMUX = D								
<b>Package Type:</b>	P1 = 1								
<b>Fiber Type:</b>	900 $\mu$ m loose tube = 2								
<b>Connectors:</b>									
Special = 0 None = 1 FC/PC = 2 FC/SPC = 3 FC/APC = 4 SC/PC = 5 SC/SPC = 6 SC/APC = 7 ST = 8 LC = 9									

## Package Dimensions:



## Spectra:



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