

Features

- 8-channel optical mux and demux modules in field hardened enclosures
- Channels spaced on standard 100-GHz-spaced DWDM ITU grid
- Flat-top passband
- High optical isolation
- Supports both forward and return path transmission of analog and digital signals
- Mux and demux pairs optimized for minimum combined insertion loss across all channels
- Options available for fiber and connector types
- Epoxy-free on optical path

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DWDM Mux and Demux Field Passives

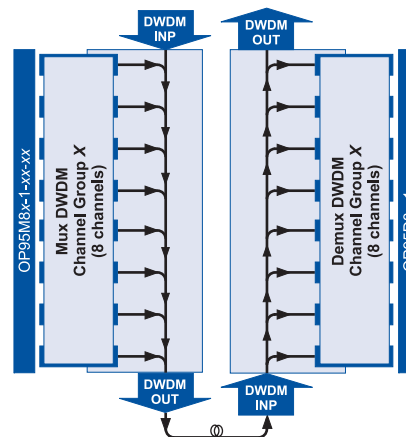


Pictured above: Model OP95M8K-1-R2-AS 8-channel Mux Module in Ruggedized "F" Case

Aurora Networks' OP95M8x and OP95D8x series 8-channel DWDM multiplexers and demultiplexers facilitate DWDM architectures. DWDM technology can dramatically increase network capacity without requiring additional fiber be deployed for super-trunking or narrowcasting applications.

Aurora Networks supports DWDM architectures with a variety of products having center frequency spacing on the standard DWDM ITU Grid (ITU-T G.694.1). In many of Aurora's products, these frequencies are logically partitioned into groups of 4, 8, or 16 channels (with letters used to designate channel groups). That concept is employed in the OP95M8x and OP95D8x series of 8-channel mux and demux modules, where five channel group configurations are available for 40 channels (20 to 59) on a DWDM grid with 100 GHz channel spacing.

These ruggedized modules have been designed for use in an outdoor environment with a temperature range of -40° to $+85^{\circ}\text{C}$.



OP95M8x / OP95D8x

Product Specifications

Physical:

- Dimensions: 3.78" L x 3.07" W x 0.31" H
(9.6 cm x 7.8 cm x 0.8 cm)
- Weight: 1.0 lbs (0.45 kg)

Environmental:

- Operating temperature range: -40° to +85°C (-40° to +185°F)
- Storage temperature range: -40° to +85°C (-40° to +185°F)
- Humidity: 5% to 95% non-condensing

Optical (all models):

- Return loss, min: 45 dB
- Polarization dependent loss, max: 0.15 dB (<0.1 dB typ)

- Ripple within passband: 0.5 dB
- Channel spacing: 100 GHz

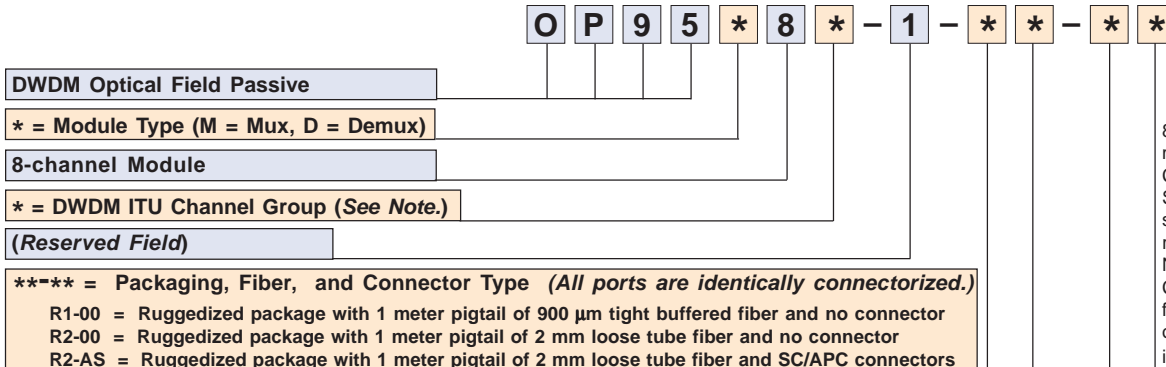
Optical Interface:

- Optical connectors: *See Ordering Information for available options.*
- Model OP95M8x-1-zz-zz:
Ch yy INP (8 channel add inputs for Channel Group x)
DWDM INP (input from previous mux in a cascade)
DWDM OUT (output to fiber network)
- Model OP95D8x-1-zz-zz:
Ch yy (8 channel drop outputs for Channel Group x)
DWDM INP (input from fiber network)
DWDM OUT (output to next demux in a cascade)

	Model Number	
	Mux Modules	Demux Modules
	OP95M8x-1-zz-zz	OP95D8x-1-zz-zz
• Insertion losses, max ¹ (dB)		
Ch yy INP to DWDM OUT	2.6	N/A
DWDM INP to DWDM OUT	2.2	2.2
DWDM INP to Ch yy OUT	N/A	2.6
Paired insertion loss ²	3.2	3.2
• Uniformity, max ¹ (dB)		
Module	1.5	1.5
Paired	1.0	1.0
• Passband @ 0.5 dB (nm)		
Ch yy INP to DWDM OUT	±0.125	±0.125
DWDM INP to DWDM OUT	See Note 3.	See Note 3.
• Directivity, min (dB)	55	N/A
• Isolation, adjacent channel, min (dB)	N/A	32
• Isolation, non-adjacent channel, min (dB)	N/A	45
• Power handling, any input port, max (dBm)	21.8	21.8

TABLE NOTES: ¹Including connectors; ²Paired insertion loss when combined with 8-ch demux module from Ch yy INP to Ch yy OUT, and vice-versa; ³ Passes 1420-1620 nm with a notch at the channel add/drop band and WDL within ±0.15 dB.

Ordering Information



Note
8-channel mux and demux modules are available for Channel Groups K, M, P, S, and U on a 100 GHz-spaced ITU grid. Please refer to the Aurora Networks DWDM ITU Grid Channel Plan data sheet for a complete description of the channels included in these groups.



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