Features

- 4-channel optical mux and demux modules with cascade ports for daisy-chaining of multiple modules
- Channels spaced on standard 100 GHz 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
- SC/APC connectors ensure performance repeatability, compatibility, and easy installation and maintenance
- Optional line monitoring tap (–20 dB from mux output or demux input)
- Industry's highest packaging density (up to 32 modules per chassis)
- Occupies one half-depth slot
- LGX chassis-compatible

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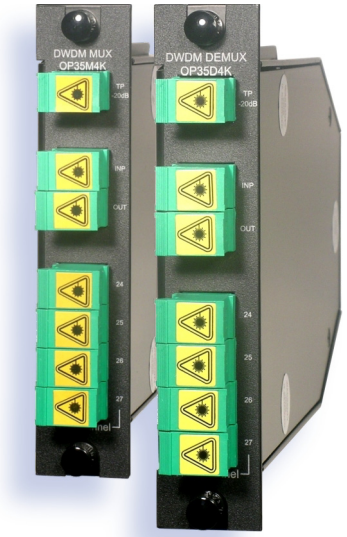
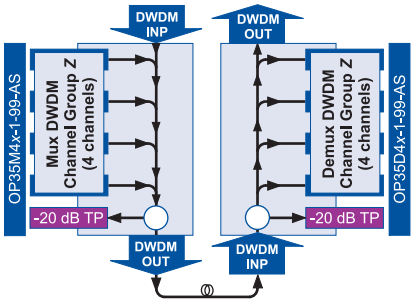
DWDM Mux and Demux Modules
(4 Channels on 100GHz-spaced ITU Grid)



Pictured above: Models OP35M4K-1-99-AS 4-channel Mux Module and OP35D4K-1-99-AS 4-channel Demux Module (both with -20dB test point and cascade ports)

Aurora Networks' OP35M4*x* and OP35D4*x* series 4-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 100 GHz center frequency spacing on the standard DWDM ITU Grid (ITU-T G.694.1) for 40 channels from Channel 20 to Channel 59. In many of Aurora's products, these channels are logically partitioned into groups of 4, 8, or 16 channels (with letters used to designate channel groups). That concept is employed in the OP35M4*x* and OP35D4*x* series of 4-channel mux and demux modules.



OP35M4*x* / OP35D4*x*

Product Specifications

Physical:

- Dimensions: 6.5” D x 5.3” H x 1.0” W (3RU)
  (16.5 cm x 13.5 cm x 2.5 cm)
- Weight: 0.8 lbs (0.4 kg)

Environmental:

- Operating temperature range: –20º to +65ºC (–4º to +149ºF)
- Storage temperature range: –40º to +85ºC (–40º to +185ºF)
- Humidity: 5% to 95% non-condensing

Optical (all models):

- Return loss, min: 45 dB
- Polarization dependent loss, max: 0.2 dB (<0.1 dB typ)
- Ripple within passband: 0.5 dB
- Channel spacing: 100 GHz (ITU grid)
- Power handling, max (any input port): 24.8 dBm
- Wavelength passthrough: 1420–1610 nm

Optical Interface:

- Optical connectors: SC/APC

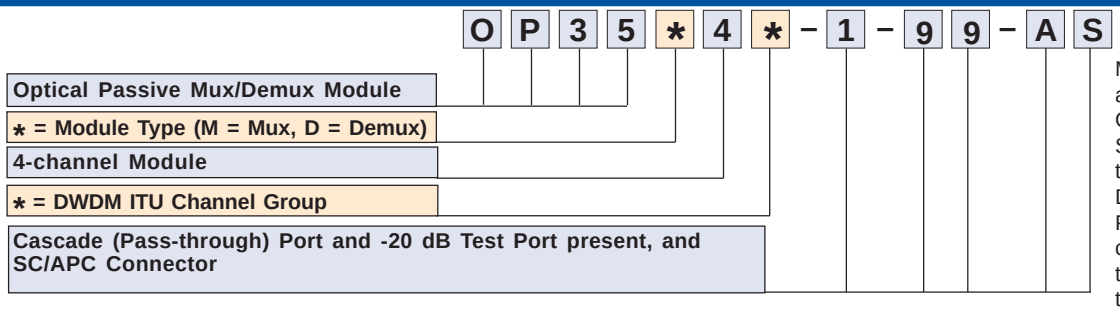
- Model OP35M4*x*-1-99-AS:
  DWDM INP (input from previous mux)
  Ch *yy* (4 channel add inputs for Channel Group *x*)
  DWDM OUT (output to fiber network or next mux)
  TP –20dB (1% tap, test point from DWDM OUT)

- Model OP35D4*x*-1-99-AS:
  DWDM INP (input from fiber network or previous demux)
  Ch *yy* (4 channel drop outputs for Channel Group *x*)
  DWDM OUT (to next demux)
  TP –20dB (1% tap, test point from DWDM INP)

	Mux Module OP35M4*x*-1-99-AS *(with –20 dB T.P.)*	Demux Module OP35D4*x*-1-99-AS *(with –20dB T.P.)*
• Insertion losses, max[1] (dB)		
Ch *yy* INP to DWDM OUT	1.8	*N/A*
DWDM INP to Ch *yy* OUT	*N/A*	1.8
Paired insertion loss[2]	2.9	2.9
DWDM INP to DWDM OUT	1.4	1.4
• DWDM OUT to -20dB Tap Ratio, max[1] (dB)	20.4	20.4
• Uniformity, max[1] (dB)		
Module	0.8	0.8
Paired	0.6	0.6
• Passband @ 0.5 dB (nm)	±0.12	±0.12
• Directivity, input ports, min (dB)	55	*N/A*
• Directivity, pass-through port, min (dB)	45	*N/A*
• Isolation, adjacent channel, min (dB)	*N/A*	30
• Isolation, non-adjacent channel, min (dB)	*N/A*	45

NOTES: [1]Including connectors; [2] Paired insertion loss when combined with 4-ch demux module from Ch *yy* INP to Ch *yy* OUT, and vice-versa

Ordering Information



Note

Mux and demux modules are available for Channel Groups J, K, L, M, N, P, R, S, T, and U. 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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