

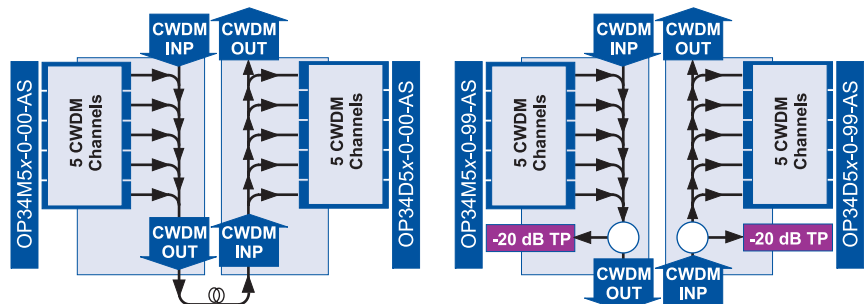
## Features

- 15 CWDM wavelengths in 3 groups of 5 each
- Designed for use with uncooled lasers based on 20 nm channel spacing
- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- High channel isolation to minimize crosstalk
- Low polarization dependent loss (PDL)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Optional integrated 1310 nm combiner/splitter
- Optional line monitoring tap
- Occupies two half-depth slots
- 1310 nm port as cascade port for very low channels

## 5-channel CWDM Demultiplexer

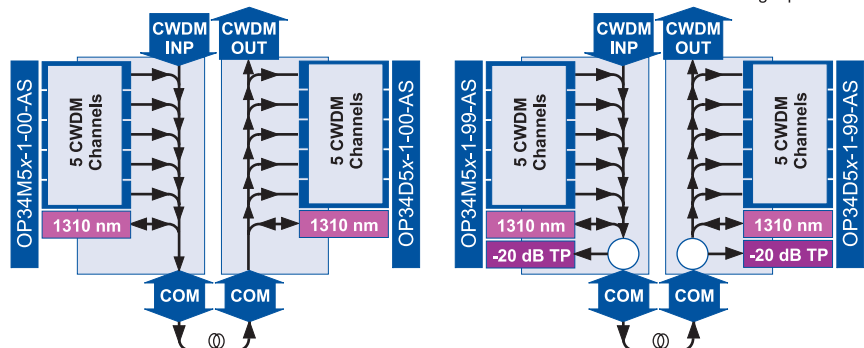


Aurora Networks' OP34D5x series 5-channel CWDM demultiplexers are designed to demultiplex five CWDM ITU-grid optical wavelengths from one fiber input, producing five individual wavelengths ranging from 1270 to 1350 nm ("very low channels" group), 1430 to 1510 nm ("low channels" group), or from 1530 to 1610 nm ("high channels" group), with 20 nm spacing between channels. Functional block diagrams of several available model options are shown below.



5-channel Mux and Demux Modules, with 5 "Very Low" channels (1270 - 1350nm), 5 "Low" channels (1430 - 1510nm) or 5 "High" channels (1530 - 1610nm)

Same as models at left, with optional additional -20 dB line monitoring tap



Same as above, with optional integrated 1310nm combiner/splitter (only available on models for "Low" and "High" channels)

Same as models at left, with optional additional -20 dB line monitoring tap

# OP34D5x

# Product Specifications

### Physical:

- Dimensions: 6.5" D x 4.3" H x 1.0" W (3RU)  
(16.5 cm x 11 cm x 2.5 cm)
- Weight: 1.5 lbs (0.7 kg)

### Environmental:

- Operating temperature range: -20° to +65°C (-4° to +149°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: 20 nm
- Power handling, max (any input port): 21.8 dBm

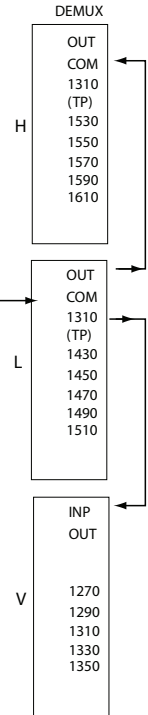
### Wavelength Passthrough:

- V models only pass wavelengths between 1270 to 1350 nm
- H and L models only pass wavelengths between 1430 to 1610 nm

### Optical Interface:

- Optical connectors: SC/APC
- Models OP34D5x-0-00-AS (x = V, L or H – Very Low, Low or High channel group):  
COM (input from fiber network)  
Wavelength xxxx (5 channel drops for xxxx = 1270–1350, or 1430–1510, or 1530–1610 nm)
- Models OP34D5x-1-00-AS (x = L or H – Low or High channel group):  
COM (input from fiber network; I/O to/from fiber network for 1310 nm)  
1310 nm (input/output to/from fiber network for 1310 nm)  
Wavelength xxxx (5 channel drops for xxxx = 1430–1510, or 1530–1610 nm)
- Models OP34D5x-0-99-AS (x = V, L or H – Very Low, Low or High channel group):  
COM (input from fiber network)  
Wavelength xxxx (5 channel drops for xxxx = 1270–1350, or 1430–1510, or 1530–1610 nm)  
TP -20dB (1% tap, test point from COM)
- Models OP34D5x-1-99-AS (x = L or H – Low or High channel group):  
COM (input from fiber network; I/O to/from fiber network for 1310 nm)  
1310 nm (input/output to/from fiber network for 1310 nm)  
Wavelength xxxx (5 channel drops for xxxx = 1430–1510, or 1530–1610 nm)  
TP -20dB (1% tap, test point from COM)

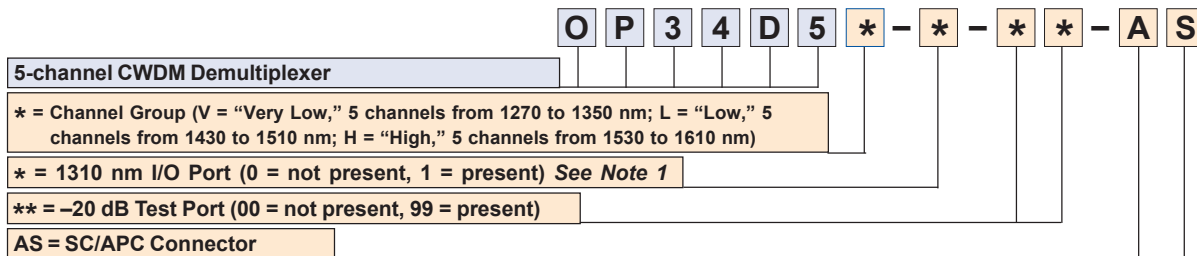
Only L and H models include a CWDM OUT port which serves as a cascade port for transmitting the remaining multiplexed 5-channel signal from "High channel group" to "Low channel group" modules, or vice-versa. See diagram at right.



	Model Number			
	OP34D5x-0-00-AS	OP34D5x-1-00-AS	OP34D5x-0-99-AS	OP34D5x-1-99-AS
• Insertion losses, max <sup>1</sup> (dB)				
COM to Channel xxxx output	2.0	2.5	2.3	2.7
1310 to COM	N/A	1.1	N/A	1.3
CWDM to COM	1.7	2.2	2.0	2.4
Paired insertion loss <sup>2</sup>	2.8	3.7	3.3	4.3
• COM to -20dB Tap Ratio, max <sup>1</sup> (dB)	N/A	N/A	20.4	20.4
• Passband for CWDM @ 0.5 dB (nm)	13	13	13	13
• Passband for 1310 nm @ 0.5 dB (nm)	N/A	1270-1350	N/A	1270-1350
• Adjacent channel isolation, min (dB)	35	35	35	35
• Non-adjacent channel isolation, min (dB)	45	45	45	45
• 1310-COM isolation, min (dB)	N/A	60	N/A	60
• CWDM directivity, min (dB)	N/A	55	55	55
• 1310 directivity, min (dB)	N/A	65	N/A	65

NOTES: <sup>1</sup>Including connectors; <sup>2</sup>(Paired insertion loss when combined with 5-wavelength mux module from Ch xxxx INP to Ch xxxx OUT)

## Ordering Information



**Note 1**  
Available on "L" and "H" models only



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