

# Optical Passives (ISP)

## OP34D8C, OP34D10C

8- and 10-channel CWDM Demultiplexers with Integrated 1310 nm Combiner/Splitter, -20 dB Line Monitoring Tap and LC/APC Connectors

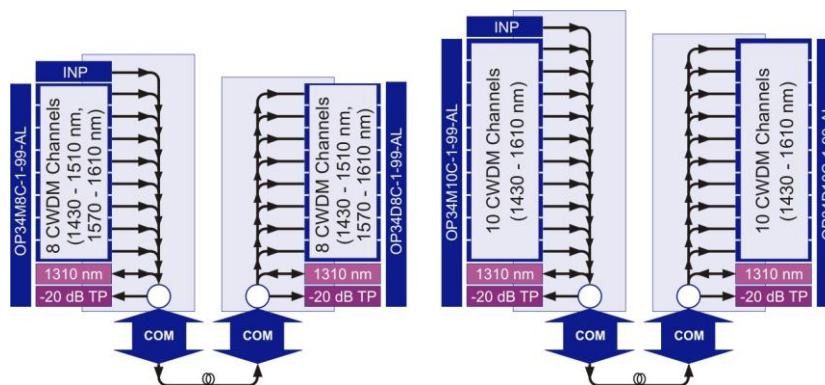
## FEATURES

- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- Low polarization dependent loss (PDL)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Integrated 1310 nm combiner/splitter
- Line monitoring tap
- Occupies one half-depth slot
- 1310 nm can act as cascade port



## PRODUCT OVERVIEW

ARRIS OPOP34D8C and OP34D10C series 8- and 10-channel CWDM demultiplexers are designed to demultiplex several CWDM ITU-grid optical wavelengths from one fiber input, with individual wavelengths ranging from 1430 to 1610 nm (with 20 nm spacing between channels) in the model OP34D10C, and 8 of the same 10 wavelengths (excepting 1530 and 1550 nm) in the model OP34D8C. These CWDM demultiplexers feature high adjacent channel isolation and are suitable for bidirectional mux/demux applications.



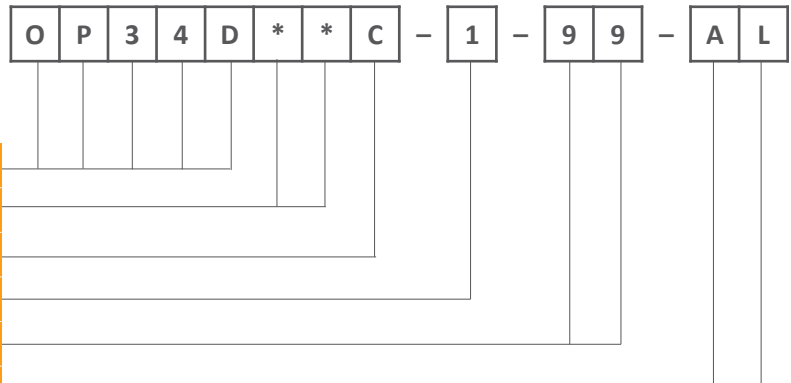
Representative functional block diagrams. Other applications, including use of field passives and/or bidirectional signal flows, are also possible.

## SPECIFICATIONS

Characteristics	Specification
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<b>Physical</b>		
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)	
<b>Environmental</b>		
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	
<b>Optical (all models)</b>		
Passband @ 0.15 dB		
COM to CWDM Ch xxxx	± 6.5 nm	
COM to OUT	1264.5-1617.5 nm except for add/drop xxxx	
Return loss, min	45 dB	
CWDM directivity, min	55 dB	
1310 directivity, min	65 dB	
Polarization dependent loss, max	0.15 dB (< 0.1 dB typ)	
Ripple within passband	0.5 dB	
COM to -20 dB Tap Ratio (including connectors), max	20.4 dB	
Channel spacing	20 nm	
Power handling, max (any input port)	21.8 dBm	
	OP34D8C-1-99-AL	OP34D10C-1-99-AL
Insertion losses (including optical connectors), max <sup>1</sup> (dB)		
COM to Ch xxxx INP	3.4	3.9
COM to OUT	2.9	N/A
1310 to COM	1.6	1.6
Isolation, min (dB)		
COM to Ch xxxx INP	35	35
1310 to COM	60	60
Adjacent channel	35	35
Non-adjacent channel	45	45
Optical connectors		
LC/APC		
Model OP34D8C-1-99-AL	<ul style="list-style-type: none"> <li>• COM (input from network for CWDM; output to network for 1310)</li> <li>• OUT (cascade channel output to next demux)</li> <li>• 1310 (input/output to/from fiber network for 1310 nm)</li> <li>• Ch xxxx OUT (8 channels dropped for xxxx = 1430, 1450, 1470, 1490, 1510, 1570, 1590 and 1610 nm)</li> <li>• TP -20 dB (1% tap, test point from COM)</li> </ul>	
Model OP34D10C-1-99-AL	<ul style="list-style-type: none"> <li>• COM (input from network for CWDM; output to network for 1310)</li> <li>• 1310 (input/output to/from fiber network for 1310 nm)</li> <li>• Ch xxxx OUT (10 channels dropped for xxxx = 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm)</li> <li>• TP -20 dB (1% tap, test point from COM)</li> </ul>	

**ORDERING INFORMATION**



- CWD M Demultiplexer
- \*\* = number of channels (8 or 10)
- Reserved field
- 1310 nm I/O Port present
- 20 dB Test Port present
- AL = LC/APC Connector

**RELATED PRODUCTS**

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## Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

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