aurora NETWORKS

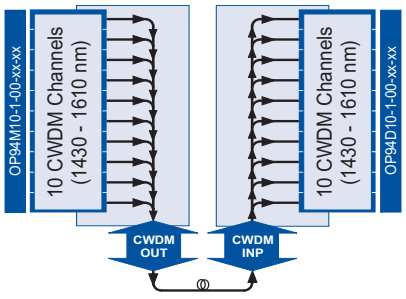
OP94M10 and OP94D10

Features

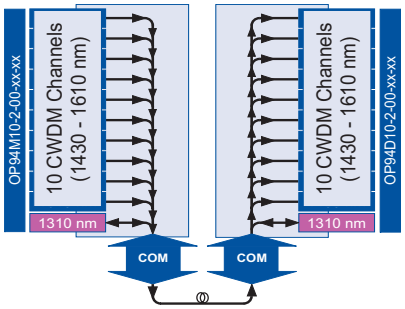
- Designed for use with uncooled lasers based on 20nm channel spacing
- Flat and wide operating passband on CWDM ITU grid (20 nm spacing)
- High channel isolation to minimize crosstalk
- Low polarization dependent loss (PDL)
- Operating temperature range –40 to +85ºC
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Variety of options for fiber and connector types
- Epoxy-free on optical path
- Optional integrated 1310 nm combiner/splitter

10-channel CWDM Multiplexer and Demultiplexer Field Passives

Aurora Networks' OP94M10 and OP94D10 series 10-channel CWDM field passives are designed to multiplex and demultiplex 10 CWDM ITU-grid optical wavelengths, with individual wavelengths ranging from 1430 to 1610 nm (20 nm spacing between channels). OP94M10 modules multiplex 10 channels onto a single fiber output, with corresponding OP94D10 modules demultiplexing a single fiber input to produce 10 individual wavelengths. All of these ruggedized modules have been designed for use in an outdoor environment within a temperature range of –40º to +85ºC.



10-channel Mux and Demux Modules (1430 - 1610nm)



10-channel Mux and Demux Modules (1430 - 1610nm) with integrated 1310 nm combiner/splitter

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OP94M10
OP94D10

Product Specifications

Physical:

- Dimensions: 3.8” L x 3.0” W x 0.4” H
  (9.7 cm x 7.6 cm x 1.1 cm)
- Weight: 1.0 lb (0.5 kg)

Environmental:

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

Optical (all models):

- Channel spacing: 20 nm
- Return loss, min: 45 dB
- Passband @ 0.5 dB: ±6.5 nm
- Ripple within passband: 0.5 dB
- Polarization dependent loss, max: 0.15 dB (<0.1 dB typ)
- Power handling, max (any input port): 21.8 dBm

Optical Interface:

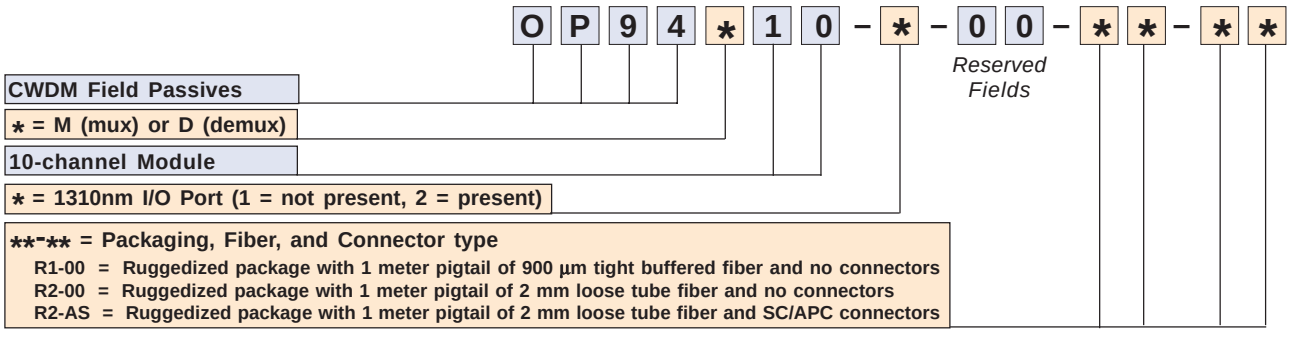
- Optical connectors: SC/APC or none (*See Ordering Information*.)
- Model OP94M10-1-00-*yy-zz (10-channel mux module)*:
  – CWDM OUT (output to fiber network)
  – Ch *xxxx* INP (10 channel adds)
- Model OP94M10-2-00-*yy-zz (10-channel mux module with 1310 combiner)*:
  – COM (output to fiber network, I/O to/from network for 1310)
  – Ch *xxxx* INP (10 channel adds)
  – 1310 (input/output to/from fiber network for 1310 nm)
- Model OP94D10-1-00-*yy-zz (10-channel demux module)*:
  – CWDM INP (input from fiber network)
  – Ch *xxxx* OUT (10 channel drops)
- Model OP94D10-2-00-*yy-zz (10-channel demux module with 1310 splitter)*:
  – COM (input from fiber network, I/O to/from network for 1310)
  – Ch *xxxx* OUT (10 channel drops)
  – 1310 (input/output to/from fiber network for 1310 nm)

Mux	OP94M10 *(10-channel)*
• Insertion losses[1], max (dB)	
Ch *xxxx* INP to COM	3.1 (3.3)
1310 to COM	1.1 (1.3)
Paired insertion loss[2]	4.0 (4.4)
• Directivity, min (dB)	55
• Passband for 1310 @ 0.5 dB (nm)	1263.5-1357.5
• 1310 Directivity, min (dB)	65
• 1310-COM isolation, min (dB)	60

Demux	OP94D10 *(10-channel)*
• Insertion losses[1], max (dB)	
COM to Ch *xxxx* OUT	3.1 (3.3)
1310 to COM	1.1 (1.3)
Paired insertion loss[2]	4.0 (4.4)
• Channel isolation, min (dB)	
Adjacent channels	35
Non-adjacent channels	45
• Directivity, min (dB)	55
• Passband for 1310 @ 0.5 dB (nm)	1263.5-1357.5
• 1310 Directivity, min (dB)	65
• 1310-COM isolation, min (dB)	60

NOTES:
[1]Insertion losses are shown without (and with) connectors, and assuming optional 1310nm I/O Port is present.
[2]Paired insertion loss when combined with corresponding applicable 10-wavelength demux module (from Ch *xxxx* INP to Ch *xxxx* OUT)

Ordering Information



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Corporate Headquarters
5400 Betsy Ross Drive
Santa Clara, CA 95054
Tel 408.235.7000
Fax 408.845.9045

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