

Features

- 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
- Removable adapters for easy cleaning
- Industry's highest packaging density (up to 32 modules per chassis)
- Occupies one half-depth slot

Single-channel CWDM Optical Filter



Aurora Networks' OP34F1D series Single-channel CWDM Optical Filters are three-port filters that are used to add/drop a CWDM wavelength to/from a set of CWDM optical wavelengths, where the wavelengths are 1270, 1290, ..., 1350, 1430, 1450, ..., 1610 nm on the CWDM ITU grid (*i.e.*, with 20 nm spacing). Each OP34F1D module contains two sets of identical filters (performing add/drop functions on the same CWDM wavelength).

These filters have been designed with low insertion loss and high channel isolation, and are packaged in Aurora's very compact half-depth module for mounting in the CH3000 chassis or PF3000 frame. The packaging concept for Aurora's family of optical passives is similar to the well recognized LGX package; and, although Aurora's version of the LGX module is slightly narrower (for higher packaging density), it will also mount in any standard LGX chassis. Aurora's implementation maintains the advantages of the LGX concept (which enables easy, snap-in installation) while providing higher packaging density, greater flexibility and scalability to the network operator.

OP34F1D

Product Specifications

Physical:

- Dimensions:
6.5" D x 4.3" H x 1.0" W (3RU) (17 cm x 11 cm x 2.5 cm)
- Weight:
0.8 lbs (0.36 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 Interface:

- Optical connectors: SC/APC
- Mux input / output ports (for each of two filters):

	Function as MUX	Function as DEMUX
COM	output to fiber network	input from fiber network
CWDM	CWDM pass-through input	CWDM pass-through output
Ch xxxx I/O	xxxx add / input channel	xxxx drop / output channel
- Wavelength Passthrough:
1270–1350 models: Only wavelength between 1264.5–1357.5 nm pass
1430–1610 models: Only wavelength between 1424.5–1617.5 nm pass

Optical:

- Channel spacing: 20 nm
- Channel plan (CWDM wavelengths): (See *Ordering Information*.)
- Passband @ 0.5 dB: ±6.5 nm
- Ripple within passband: 0.5 dB
- Return loss, min: 45 dB
- Polarization dependent loss, max: 0.07 dB (<0.05 dB typ)
- Power handling, max (any input port): 21.8 dBm
- Insertion losses, max:
Ch xxxx I/O to COM: 0.7 dB
CWDM I/O to COM: 0.6 dB
- Adjacent channel isolation, min: 35 dB
- Non-adjacent channel isolation, min: 45 dB
- Directivity, min: 50 dB

Ordering Information

OP34F1D - * * * * - 0 - 0 0 - A S

Dual-packaged Single-channel CWDM Filters

**** = CWDM Wavelength (1270, 1290, ..., 1350, 1430, 1450, ..., 1610 nm)
Specified wavelength is used for each of two filters in the module.

(Reserved Fields)

AS = SC/APC Connector



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