Features

- Low insertion loss
- Selection of supported narrowcast channels on standard 100 GHz DWDM ITU Grid
- High channel isolation to minimize crosstalk
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Removable adapters for easy cleaning
- Occupies one half-depth slot

Single-channel DWDM Optical Filter

Aurora Networks OP35F1x series Single-channel DWDM Optical Filters have been designed with low insertion and polarization dependent losses. These three-port filters are used to add (or drop) a single DWDM narrowcast wavelength to (or from) a set of DWDM optical wavelengths.

In addition to packages containing a single filter, dual-filter packages are also available in which the same narrowcast wavelength may be added to (or dropped from) two independent sets of DWDM optical wavelengths.

The filter is packaged in an LGX compatible module and can be mounted in the Aurora Networks CH3000 chassis, occupying one half-depth slot. It is designed to be used in controlled indoor environments within a temperature range of –20 to +65ºC.

OP35F1*x* 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 (0.68 kg)

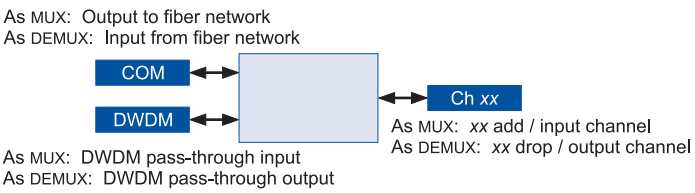
Environmental:

- 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 Interface:

- Optical connectors: SC/APC
- Mux input / output ports:

	Function as MUX	Function as DEMUX
Ch *xx* I/O	*xx* add / input channel	*xx* drop / output channel
COM	output to fiber network	input from fiber network
DWDM	DWDM pass-through input	DWDM pass-through output



Optical:

- Insertion losses, including connectors:

	typical	max
CH. *xx* I/O to COM:	0.75 dB	0.95 dB
DWDM I/O to COM:	0.50 dB	0.70 dB

- Passband @ 0.5 dB: ±0.25 nm
- Ripple within passband: 0.5 dB
- Directivity, min: 55 dB
- Return loss, min: 45 dB
- Polarization dependent loss, max: 0.1 dB (<0.05 dB typ)
- Adjacent channel isolation, min: 35 dB
- Non-adjacent channel isolation, min: 45 dB
- DWDM isolation, min: 13 dB
- Power handling, max (any input port): 21.8 dBm
- Channel spacing: 100 GHz
- Wavelength passthrough: Only 1425–1617 nm (input and output)

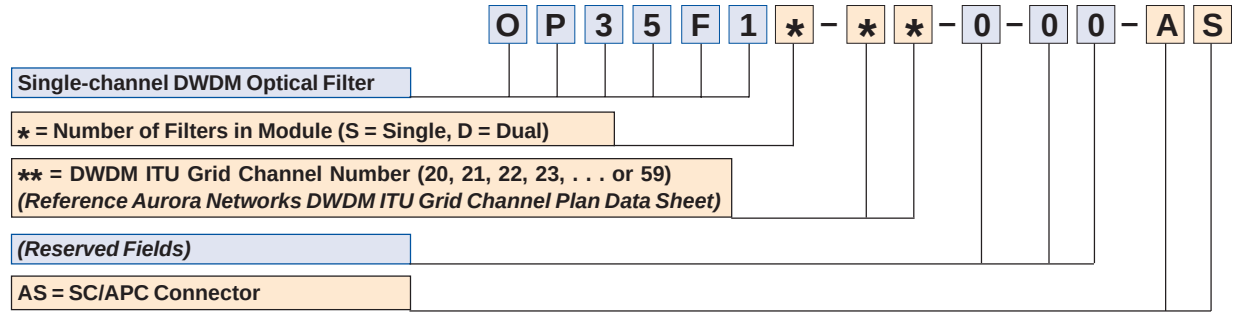
ITU Channel Plans:

Aurora Networks supports DWDM network 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 (1561.42 nm) to Channel 59 (1530.334 nm).

For more complete description of available DWDM ITU Grid channels and Aurora's partitioning into convenient logical groups of 4, 8 and 16 channels in products for DWDM mux and demux applications, please refer to the Aurora Networks DWDM ITU Grid Channel Plan data sheet.

When ordering Single-channel DWDM Optical Filters, please note, for network planning purposes, that AT3550 "BC" series broadcast transmitters operate at 1545.3 nm ± 0.9 nm, occupying the approximate region of DWDM ITU Grid channels 39 through 41; as a result no channel wihin Aurora's ITU Channel Plan "Group P" (channels 40 through 43) should be used as the narrowcast channel. Similarly, AT3550 "BA" series broadcast transmitters operate at 1563 nm, occupying the approximate region of DWDM ITU Grid channels 17 through 19; as a result no channel within Aurora's "Group H" (channels 16 through 19) should be used as the narrowcast channel.

Ordering Information



aurora NETWORKS

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

P/N 87-10114 (Rev D, 09/07)