aurora NETWORKS

# OP35F1*x*-CF

## Features

- 3-port filters to combine or separate red and blue (or CWDM and DWDM) bands
- Low insertion loss
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Removable adapters for easy cleaning
- Options for standard or high isolation
- Optional line monitoring tap
- Occupies one half-depth slot

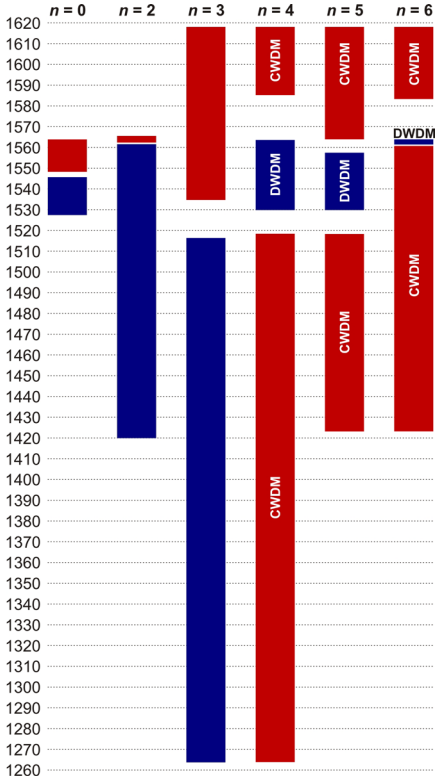
# Red/Blue and CWDM/DWDM Combiner/Separator Filters


Aurora Networks OP35F1x-CF series of combiner/separator filters are 3-port filters that combine (or separate) red and blue (or CWDM and DWDM) bands. The six different available band combinations are shown graphically in the figure at right.

In addition to packages containing a single filter, dual-filter packages are also available, and both single- and dual-packaged filter modules are also available with an optional -20 dB tap for monitoring.

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.

**Combiner/Separator Filter Passbands**




For model numbers of the form OP35F1***x***-CF-***m-n-ab-yz***, the variable ***n*** defines passband options. For ***n*** = 0, 2, or 3, bands are identified as red or blue. For ***n*** = 4, 5, or 6, bands are identified as CWDM or DWDM.

Optical Passives (for CH3000 and Field, except CWDM Equipment)

# OP35F1*x*-CF Product Specifications

## Physical:

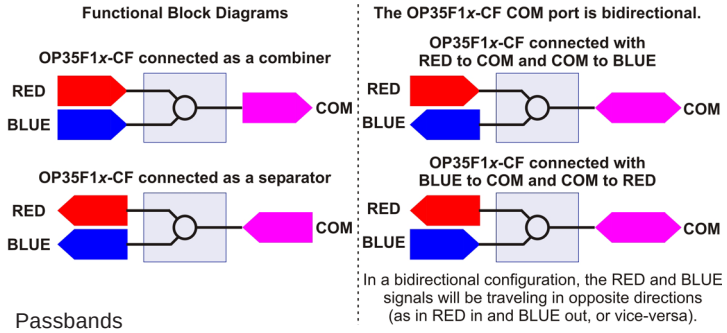
- Dimensions: 6.5" D x 5.2" H x 1.0" W (3RU) (16.5 cm x 13 cm x 2.5 cm)
- Weight: 0.8 lbs (0.36 kg)

## 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:

- Optical connectors: SC/APC




- Passbands

(nm, specified for values of ***n*** in model numbers of the form OP35F1x-CF-m-***n***-ab-AS)

| ***n*** | RED | BLUE |
|---|---|---|
| 0 | 1549.0 - 1563.8 | 1528.0 - 1545.6 |
| 2 | 1562.6 - 1565.0 | 1420.0 - 1561.0 |
| 3 | 1535.0 - 1618.0 | 1264.0 - 1517.0 |
| ***n*** | CWDM (or RED) | DWDM (or BLUE) |
| 4 | 1263.5 - 1519.0 and 1585.0 - 1617.5 | 1530.0 - 1563.3 |
| 5 | 1423.5 - 1519.0 and 1563.5 - 1617.5 | 1530.3 - 1558.2 |
| 6 | 1423.5 - 1561.0 and 1583.5 - 1617.5 | 1562.2 - 1564.0 |

- Ripple within passband: 0.5 dB
- Power handling, max (any input port): 24.8 dBm
- Insertion losses, including connectors:
  Max (and typical) values, in dB, shown for models without and with –20 dB line monitoring taps (***yy*** = 00 and 99, respectively) and with standard or high isolation (***m*** = 1 and 2, respectively)

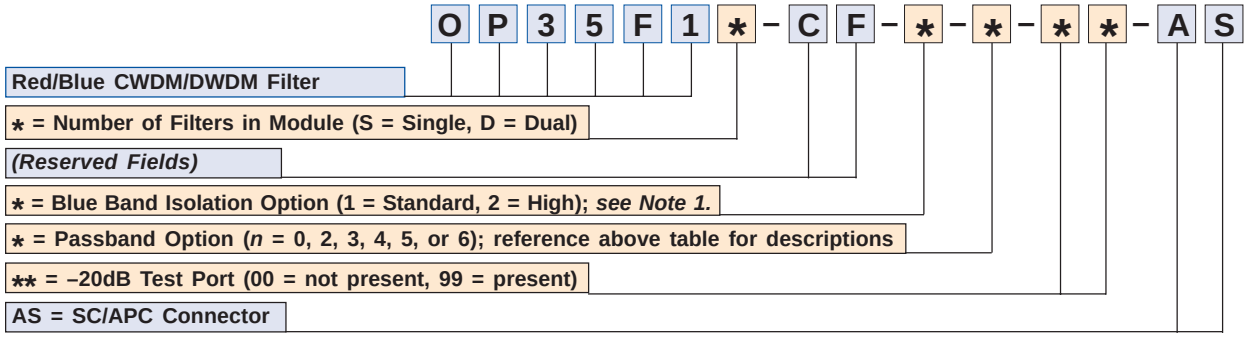
| | | BLUE to COM | | RED to COM | |
|---|---|---|---|---|---|
| ***n*** | ***m*** | ***yy*** = 00 | ***yy*** = 99 | ***yy*** = 00 | ***yy*** = 99 |
| 0 | 1 | 0.6 (0.4) | 0.9 (0.7) | 0.5 (0.3) | 0.8 (0.6) |
| | 2 | 1.0 (0.8) | 1.3 (1.1) | 0.5 (0.3) | 0.8 (0.6) |
| 2,3 | 1 | 0.5 (0.3) | 0.8 (0.6) | 0.6 (0.4) | 0.9 (0.7) |
| | 2 | 0.5 (0.3) | 0.8 (0.6) | 1.0 (0.8) | 1.3 (1.1) |
| | | DWDM to COM | | CWDM to COM | |
| ***n*** | ***m*** | ***yy*** = 00 | ***yy*** = 99 | ***yy*** = 00 | ***yy*** = 99 |
| 4,5,6 | 1 | 0.6 (0.4) | 0.9 (0.7) | 0.5 (0.3) | 0.8 (0.6) |
| | 2 | *N/A* | *N/A* | *N/A* | *N/A* |

- Directivity, min: 55 dB
- Return loss, min: 50 dB
- Polarization dependent loss, max: 0.15 dB (<0.1 dB typ)
- Isolation:
  Min values, in dB, shown for models with standard or high isolation (***m*** = 1 and 2, respectively)

| ***n*** | ***m*** | BLUE–COM | RED–COM |
|---|---|---|---|
| 0 | 1 | > 25 | > 15 |
| | 2 | > 50 | > 15 |
| 2,3 | 1 | > 15 | > 25 |
| | 2 | > 15 | > 50 |
| ***n*** | ***m*** | DWDM to COM | CWDM to COM |
| 4,5,6 | 1 | > 25 | > 15 |
| | 2 | *N/A* | *N/A* |

- –20 dB tap monitoring option (***yy*** = 99): 1% bi-directional test point for output/input from/to COM port

## Ordering Information




**Note 1:** The high isolation option is available only for Passband Options 0 and 2.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