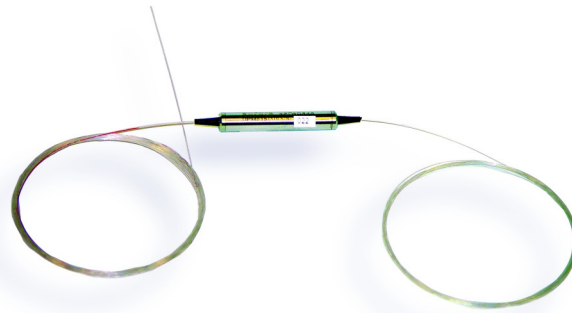


## Features

- 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)
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Variety of options for module body robustness, fiber buffer and connector types
- Epoxy-free on optical path

## Single-channel CWDM Optical Filter



*N0 (non-ruggedized) packaging option shown above*

---

Aurora Networks' OP94F1S 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). The filters are available in three versions of packaging for outdoor use, two versions ruggedized for easy handling and the third version, though not ruggedized, being smaller and easier to fit in a splice enclosure. All versions are designed for use in an outdoor environment within a temperature range of -40° to +85°C.

# OP94F1S

## Product Specifications

### Physical:

- Dimensions: (See Ordering Information.)
- Weight: 0.2 lbs (0.09 kg)

### Environmental:

- Operating temperature range: -40°C to +85°C (-40°F to +185°F)
- Storage temperature range: -40°C to +85°C (-40°F to +185°F)
- Humidity: 5% to 95% non-condensing

### Optical Interface:

- Optical connectors: (See Ordering Information.)
- Mux input / output ports:

	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

### 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:
 

	With connector	Without connector
Ch xxxx I/O to COM:	0.8 dB	0.6 dB
CWDM I/O to COM:	0.7 dB	0.5 dB
- Adjacent channel isolation, min: 35 dB
- Non-adjacent channel isolation, min: 45 dB
- Directivity, min: 50 dB

### Package Options:

Two examples are shown below approximately full scale, while the "S-case" option (with SC/APC connectors) is shown below at right approximately half scale.

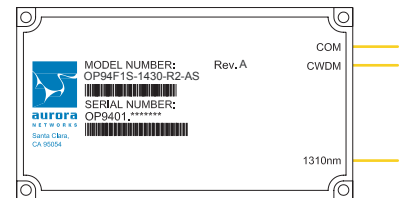
For non-ruggedized tubes, the fiber optic leads are color-coded as shown.



OP94F1S-1470-R2-00 Single-channel CWDM Optical Filter in Ruggedized Package (8.5 mm x 14 mm x 98 mm)



OP94F1S-1590-N0-00 Single-channel CWDM Optical Filter in Non-ruggedized Tube (34 mm x 5.5 mm)



OP94F1S-1430-R2-AS CWDM Optical Filter in "S-case" Ruggedized Package (9.2 mm x 51 mm x 89 mm), (shown above approximately half-scale)

## Ordering Information

O P 9 4 F 1 S - \* \* \* \* - \* \* - \* \*

**Single-channel CWDM Filter**

\*\*\*\* = CWDM Wavelength (1270, 1290, 1310, 1330, 1350, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610 nm)

\*\*\*\* = Packaging, Fiber and Connector Type  
 N0-00 = 250 μm bare fiber in 34 x 5.5 mm Non-ruggedized Tube,  
 R2-00 = 2 mm fiber in 8.5 x 14 x 98 mm Ruggedized Package  
 R2-AS = 2 mm fiber with SC/APC Connectors in 9.2 x 51 x 89 mm Ruggedized Package

**Note:** Fiber length for all models is 1±0.15 meters; other lengths are available upon request.



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