

# Optical Passives (ISP)

## OP35F4S

### 4-channel DWDM Optical Filter

## FEATURES

- Add or drop a group of four wavelengths on the 100 GHz DWDM ITU Grid
- Low insertion loss
- 4-skip-0 filter
- Optional line monitoring tap
- SC/APC connectors ensure performance repeatability, compatibility and easy installation and maintenance
- Removable adapters for easy cleaning
- Occupies one half-depth slot



## PRODUCT OVERVIEW

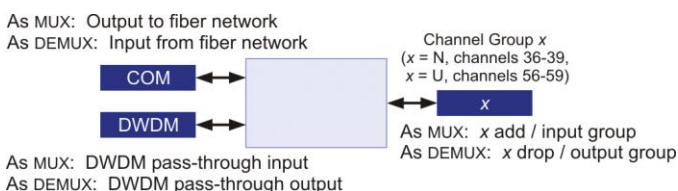
The ARRIS OP35F4S series 4-channel DWDM Optical Filters have been designed with low insertion loss. These three-port filters are used to add (or drop) a group of four DWDM narrowcast wavelengths to (or from) a set of DWDM optical wavelengths. Two models are available, with channel group N used to add or drop channels 36 through 39, and channel group U used to add or drop channels 56 through 59.

The filter is packaged in an LGX compatible module and can be mounted in the ARRIS CH3000 chassis, occupying one half-depth slot. It is designed to be used in controlled indoor environments within a temperature range of  $-20^{\circ}$  to  $+65^{\circ}\text{C}$ .

**SPECIFICATIONS**

**Characteristics Specification**

<b>Physical</b>			
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)		
<b>Environmental</b>			
Operating Temperature Range	-20°C to +65°C (-4°F to +149°F)		
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)		
Humidity	5% to 95% non-condensing		
<b>Optical Interface</b>			
Optical connectors	SC/APC		
Mux input/output ports		Function as MUX	Function as DEMUX
	DWDM	DWDM pass-through input	DWDM pass-through output
	GRP x	x add/input channel group	x drop/output channel group
	COM	output to fiber network	input from fiber network



TP, -20 dB	Optional bi-directional 1% tap, test point from COM		
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**Optical**

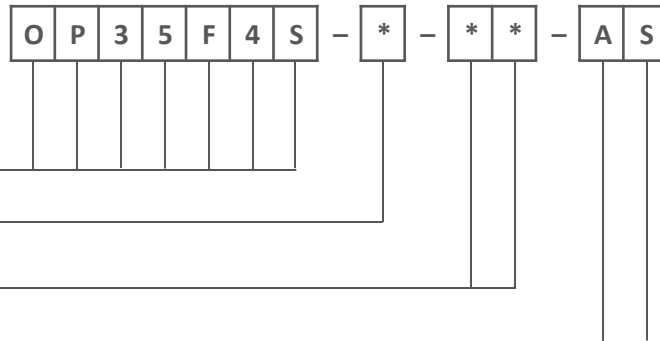
Insertion losses, max, including connectors		with 1% tap	without 1% tap
	GRP x to COM	1.0 dB	0.8 dB
	DWDM to COM	0.8 dB	0.6 dB
Directivity, min	50 dB		
Passband @ 0.15 dB			
GRP x to COM	2.6 nm Passes Channel Group N (36-39) or U (56-59)		
DWDM to COM	Passes 1423.5 nm through 1617.5 nm with a notch at the Channel Group add/drop band.		
Return loss, min	45 dB		
Polarization dependent loss, max	0.1 dB (<0.05 dB typ)		
Adjacent channel isolation, min	25 dB		
Non-adjacent channel isolation, min	45 dB		
Reflect port isolation, min	12 dB		
Power handling, max (any input port)	21.8 dBm		
Channel spacing	100 GHz		
Channel groups	N (DWDM ITU channels 36-39) U (DWDM ITU channels 56-59)		

**ITU Channel Plans**

ARRIS 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 ARRIS's partitioning into convenient logical groups, please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet.

When ordering 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, a Channel Group N filter should not be used in that case.

ORDERING INFORMATION



- 4-channel DWDM Optical Filter
- \* = DWDM ITU Grid Channel Group (N or U)  
*(Reference ARRIS DWDM ITU Channel Plan Data Sheet)*
- 99 = -20 dB Test Port present  
00 = No Test Port present
- AS = SC/APC Connector

RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
HPON™	Installation Services

## Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

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