

# Optical Passives (ISP)

## NP34F01D

### Single-channel CWDM Optical Filter

## FEATURES

- Dual packaged single-channel CWDM filters
- 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
- LGX chassis-compatible for ISP inside plant controlled indoor environments
- Replaces OP34F1D



## PRODUCT OVERVIEW

ARRIS' NP34F01D 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 NP34F01D 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 ARRIS's very compact half-depth LGX module for mounting in the CH3000 chassis or PF3000 frame.

## SPECIFICATIONS

Characteristics	Specification	
<b>Physical</b>		
Dimensions	5.8" D x 5.2" H x 1.0" W (14.7 cm x 13.2 cm x 2.6 cm)	
Weight	0.8 lbs (0.36 kg)	
<b>Environmental</b>		
Operating temperature range (indoor)	-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	
<b>Optical Interface</b>		
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 Pass-through:		
• 1270–1350 models	Only wavelength between 1264.5–1357.5 nm pass	
• 1430–1610 models	Only wavelength between 1424.5–1617.5 nm pass	
<b>Optical</b>		
Channel spacing	20 nm	
Channel plan (CWDM wavelengths)	<i>(See Ordering Information)</i>	
Passband @ 0.5 dB	± 6.5 nm	
Ripple within passband, max	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 (including connectors), max:		
• Ch xxxx I/O to COM	0.7 dB	
• CWDM I/O to COM:		
Models with Standard cascade isolation	0.6 dB	
Models with High cascade isolation	0.9 dB	
Adjacent channel isolation, min	35 dB	
Non-adjacent channel isolation, min	45 dB	
Cascade isolation, min:		
• Models with Standard cascade isolation	12 dB	
• Models with High cascade isolation	25 dB	
Directivity, min	50 dB	

## RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
PF3000 Frame	Installation Services

## ORDERING INFORMATION

Part Number	Description
NP34F01DxxA0y-0LA-AS	<p>xx = CWDM Wavelength (nm): (27 = 1271; 29 = 1291; 31 = 1311; 33 = 1331; 35 = 1351; 43 = 1431; 45 = 1451; 47 = 1471; 49 = 1491; 51 = 1521; 53 = 1531; 55 = 1551; 57 = 1571; 59 = 1591; 61 = 1611)</p> <p>y = Cascade Isolation Level (S = Standard; H = High<sup>1</sup>)</p> <p><sup>1</sup> High Cascade Isolation Level available only for 1550 nm</p>

## Customer Care

Contact Customer Care for product information and sales:

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

**Note:** Specifications are subject to change without notice.

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