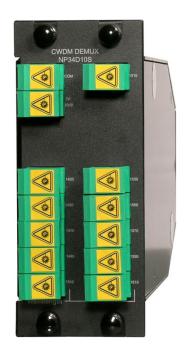


# **Optical Passives (ISP)** NP34D10S 10-channel CWDM Demultiplexer

## **FEATURES**

- Designed for use with uncooled lasers based on 20 nm 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
- Optional 1310 nm port for cascading wavelengths in the 1310 nm band
- Optional line monitoring tap
- Occupies two half-depth slots or a single half-depth slot depending on the optical connector type
- Replaces OP34D10



# PRODUCT OVERVIEW

ARRIS's NP34D10S Series 10-channel CWDM Demultiplexers are designed to demultiplex 10 CWDM ITU-grid optical wavelengths from one fiber input, producing 10 individual wavelengths ranging from 1430 to 1610 nm (with 20 nm spacing between channels).

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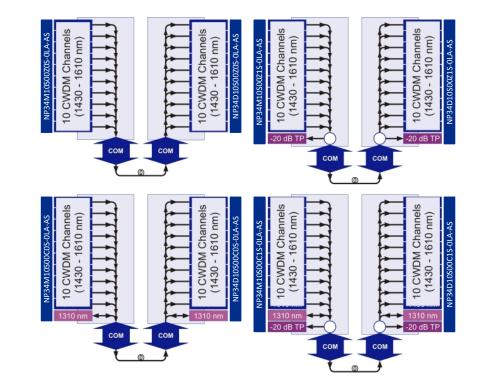
**Node Segmentation** 

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ISP-NP34D10S





SPECIFICATIONS	
Characteristics	Specification
Physical	
Dimensions	6.5" D x 4.3" H x 1.0" W (3RU) (16.5 cm x 11 cm x 2.5 cm) for NP34D10S00B1S-0LA-AL
	6.5" D x 4.3" H x 2.0" W (3RU) (16.5 cm x 11 cm x 5.0 cm) for all other available part numbers
Weight	1.3 lbs (0.6 kg) for NP34D10S00B1S-0LA-AL
	2.5 lbs (1.1 kg) for all other model numbers
Environmental	
Operating temperature range	-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
Optical (all models)	
Return loss, min	45 dB
Passband for CWDM channels @ 0.15 dBc	13 nm
Passband for 1310 nm output (unavailable in NP34D10S00Z0S-0LA-AS)	1263.5–1357.5 nm
Passband for CWDM cascade output (available only in NP34D10S00B1S-0LA-AL)	1423.5–1617.5 nm
Adjacent channel isolation, min	35 dB
Non-adjacent channel isolation, min	45 dB
1310-COM isolation, min	60 dB
CWDM directivity, min	55 dB
1310 directivity, min	65 dB
Polarization dependent loss, max (typ)	0.15 (0.1) dB
Ripple within passband, max	0.5 dB
Channel spacing	20 nm
Power handling, max (any input port)	21.8 dBm
Optical Interface	
Optical connectors	SC/APC or LC/APC (See Ordering Information)
Optical ports	See Ordering Information

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#### **TABLE 1: INSERTION LOSS**

	NP34D10S00B1S-0LA-AS	NP34D10S00C0S-0LA-AS	NP34D10S00C1S-0LA-AS	NP34D10S00Z0S-0LA-AL
Insertion losses, max <sup>1</sup> (dB)				
COM to Channel xxxx output	3.3	2.9	3.2	2.7
1310 to COM	1.3	1.1	1.3	N/A
Paired insertion loss <sup>2</sup>	4.7	3.9	4.5	3.5
COM to OUT (CWDM cascade output)	3.1	N/A	N/A	N/A
COM to -20 dB Tap Ratio, max <sup>1</sup> (dB)	20.4	N/A	20.4	N/A

NOTES:

1. Including connectors

2. Paired insertion loss when combined with 10-wavelength mux module from Ch. xxxx INP to Ch. xxxx OUT

Model Name	Description
NP34D10S00Z0S-0LA-AS	COM (input from fiber network)
	<ul> <li>Ten CWDM channel outputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> </ul>
	SC/APC connectors throughout
	Double-width module
NP34D10S00C0S-0LA-AS	COM (input from fiber network)
	<ul> <li>Ten CWDM channel outputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> </ul>
	<ul> <li>1310 (for dropping channels in the 1263.5–1357.5 nm band from the fiber network)</li> </ul>
	SC/APC connectors throughout
	Double-width module
NP34D10S00C1S-0LA-AS	COM (input from fiber network)
	<ul> <li>Ten CWDM channel outputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> </ul>
	<ul> <li>1310 (for dropping channels in the 1263.5–1357.5 nm band from the fiber network)</li> </ul>
	<ul> <li>TP –20 dB (1% tap, test point from COM)</li> </ul>
	SC/APC connectors throughout
	Double-width module
NP34D10S00B1S-0LA-AL	COM (input from fiber network)
	<ul> <li>Ten CWDM channel outputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> </ul>
	OUT (CWDM cascade output)
	<ul> <li>1310 (for dropping channels in the 1263.5–1357.5 nm band from the fiber network)</li> </ul>
	<ul> <li>TP –20 dB (1% tap, test point from COM)</li> </ul>
	LC/APC connectors throughout
	Single-width module

RELATED PRODUCTS	
CH3000	PF3000
NP34M10S	Installation Services

### **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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1510806\_RevC\_NP34D10S\_CWDM\_Demux\_10-channel

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