

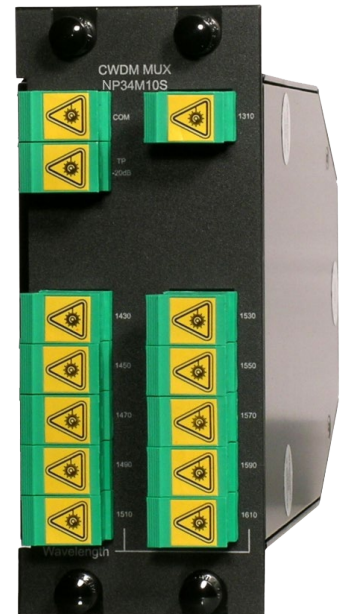
# Optical Passives (ISP)

## NP34M10S

### 10-channel CWDM Multiplexer

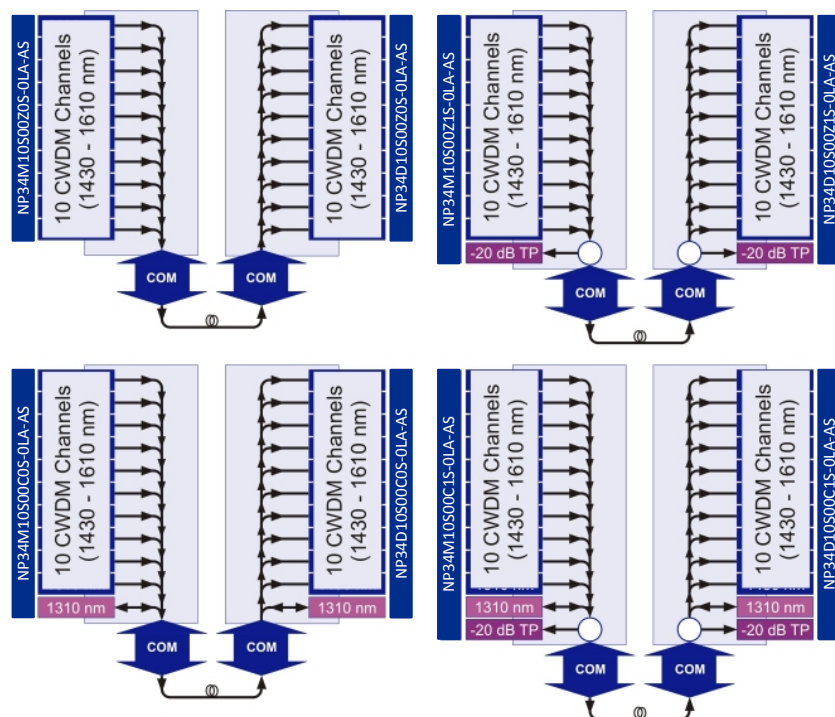
## FEATURES

- 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 integrated 1310 nm combiner/splitter
- Optional line monitoring tap
- Occupies two half-depth slots
- 1310 nm can act as cascade port
- Replaces OP34M10S



## PRODUCT OVERVIEW

ARRIS's NP34M10S Series 10-channel CWDM multiplexers are designed to multiplex 10 CWDM ITU-grid optical wavelengths onto one fiber output, with the 10 individual wavelengths ranging from 1430 to 1610 nm (with 20 nm spacing between channels).



## 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) for NP34M10S00B1S-OLA-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 NP34M10S00B1S-OLA-AL 2.5 lbs (1.1 kg) for all other model numbers
<b>Environmental</b>	
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
<b>Optical (all models)</b>	
Return loss, min (dB)	45
Polarization dependent loss, max (typ) (dB)	0.15 (0.1)
Ripple within passband, max (dB)	0.5
Channel spacing (nm)	20
Passband for CWDM channel port @ -0.15 dBc (nm)	± 7 (around the center wavelength)
Passband for 1310-nm input (unavailable in NP34M10S00Z0S-OLA-AS) (nm)	1263.5-1357.5
Passband for CWDM cascade input (available only in NP34M10S00B1S-OLA-AL) (nm)	1423.5-1617.5
CWDM directivity, min (dB)	55
1310 -nm bypass directivity, min (dB)	65
COM-to-1310-nm bypass isolation, min (dB)	60
Power handling, max (any input port) (dBm)	21.8
<b>Optical Interface</b>	
Optical connectors	SC/APC or LC/APC (See Ordering Information)
Optical ports	See Ordering Information

TABLE 1: INSERTION LOSS

	NP34M10S00B1S-OLA-AS	NP34M10S00C0S-OLA-AS	NP34M10S00C1S-OLA-AS	NP34M10S00Z0S-OLA-AS
Insertion losses, max <sup>1</sup> (dB)				
Ch xxxx INP to COM	3.3	2.9	3.2	2.7
1310 bypass to COM	1.3	1.1	1.3	N/A
Paired insertion loss <sup>2</sup>	4.7	3.9	4.5	3.5
INP (CWDM cascade input) to COM	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 demux module from Ch. xxxx INP to Ch. xxxx OUT

## ORDERING INFORMATION

Model Name	Description
NP34M10S00Z0S-OLA-AS	<ul style="list-style-type: none"> <li>• COM (output to fiber network)</li> <li>• Ten CWDM channel inputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> <li>• SC/APC connectors throughout</li> <li>• Double-width module</li> </ul>
NP34M10S00C0S-OLA-AS	<ul style="list-style-type: none"> <li>• COM (output to fiber network)</li> <li>• Ten CWDM channel inputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> <li>• 1310 (for adding channels in the 1263.5–1357.5 nm band to the fiber network)</li> <li>• SC/APC connectors throughout</li> <li>• Double-width module</li> </ul>
NP34M10S00C1S-OLA-AS	<ul style="list-style-type: none"> <li>• COM (output to fiber network)</li> <li>• Ten CWDM channel inputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> <li>• 1310 (for adding channels in the 1263.5–1357.5 nm band to the fiber network)</li> <li>• TP -20 dB (1% tap, test point from COM)</li> <li>• SC/APC connectors throughout</li> <li>• Double-width module</li> </ul>
NP34M10S00B1S-OLA-AL	<ul style="list-style-type: none"> <li>• COM (output to fiber network)</li> <li>• Ten CWDM channel inputs at 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm</li> <li>• INP (CWDM cascade input)</li> <li>• 1310 (for adding channels in the 1263.5–1357.5 nm band to the fiber network)</li> <li>• TP -20 dB (1% tap, test point from COM)</li> <li>• LC/APC connectors throughout</li> <li>• Single-width module</li> </ul>

## RELATED PRODUCTS

CH3000	PF3000
NP34D10S	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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ISP-NP34M10S