ARRIS’s NP34M05 Series 5-channel CWDM multiplexers are designed to multiplex five CWDM ITU-grid optical wavelengths onto one fiber output from individual wavelengths of 1270, 1290, ..., 1350, (“very low channels” group), 1430, 1450, ..., 1510 nm (“low channels” group), and 1530, 1550, . . ., 1610 nm (“high channels” group). Functional block diagrams of several available model options are shown on the following page.
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)
Weight 1.5 lbs (0.7 kg)

**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 input @ 0.15 dBc (available in NP34M0550LB's and NP34M0550HB's) 1263.5–1357.5 nm
CWDM directivity, min 55 dB
1310 directivity, min 65 dB
1310-COM isolation, min 60 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

**Wavelength Passbands Between INP and COM Ports** |  
NP34M0550UV 1263–1357 nm (with five 13-nm-wide notches at 1270, 1290, 1310, 1330, and 1350 nm)
NP34M0550UL 1423–1617 nm (with five 13-nm-wide notches at 1430, 1450, 1470, 1490, and 1510 nm)
NP34M0550OH 1423–1617 nm (with five 13-nm-wide notches at 1530, 1550, 1570, 1590, and 1610 nm)

**Optical Interface** |  
Optical connectors SC/APC
Optical ports See Ordering Information

**TABLE 1: INSERTION LOSS**

<table>
<thead>
<tr>
<th>NP34M0550xA0S-0LA-AS</th>
<th>NP34M0550xB0S-0LA-AS</th>
<th>NP34M0550xA1S-0LA-AS</th>
<th>NP34M0550xB1S-0LA-AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion losses, max1 (dB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Channel xxx INP to COM</td>
<td>2.0</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>1310 to COM</td>
<td>N/A</td>
<td>1.1</td>
<td>N/A</td>
</tr>
<tr>
<td>CWDM IN to COM</td>
<td>1.7</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Paired insertion loss2</td>
<td>2.8</td>
<td>3.7</td>
<td>3.3</td>
</tr>
<tr>
<td>COM to -20 dB Tap Ratio, max4 (dB)</td>
<td>N/A</td>
<td>N/A</td>
<td>20.4</td>
</tr>
</tbody>
</table>

**NOTES:**
1. Including connectors
2. Paired insertion loss when combined with 5-wavelength mux module from Ch. xxxx INP to Ch. xxxx OUT

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ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| NP34M05S0VA0S-0LA-AS | • COM (output to fiber network)  
• Five CWDM channel inputs at 1270, 1290, 1310, 1330, and 1350 nm |
| NP34M05S0VA1S-0LA-AS | • COM (output to fiber network)  
• Five CWDM channel inputs at 1270, 1290, 1310, 1330, and 1350 nm  
• TP –20 dB (1% tap, test point from COM) |
| NP34M05S0VA0S-0LA-AS | • COM (output to fiber network)  
• Five CWDM channel inputs at 1430, 1450, 1470, 1490, and 1510 nm  
• TP –20 dB (1% tap, test point from COM) |

RELATED PRODUCTS

| CH3000 | PF3000 |

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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