ARRIS’s NP35M08 and NP35D08 series 8-channel DWDM multiplexers and demultiplexers facilitate DWDM architectures. DWDM technology can dramatically increase network capacity without requiring additional fiber be deployed for super-trunking or narrowcasting applications. ARRIS supports DWDM 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 to Channel 59. This particular group of 8-channel mux and demux products are intended for use with ARRIS’s AT3545G Full Spectrum DWDM Transmitters and are available with two different combinations of eight DWDM channels.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Dimensions      | 6.5" D x 5.3" H x 1.0" W (3RU) (16.5 cm x 13.5 cm x 2.5 cm) for NP35M08S0xZ0 and NP35D08S0xZ0 modules with no cascade and test ports  
6.5" D x 5.3" H x 2.0" W (3RU) (16.5 cm x 13.5 cm x 5.1 cm) for NP35M08S0xA1 and NP35D08S0xA1 modules with cascade and test ports |
| Weight          | 1.2 lbs (0.5 kg) for NP35M08S0xZ0 and NP35D08S0xZ0 modules with no cascade and test ports  
2.0 lbs (0.9 kg) for NP35M08S0xA1 and NP35D08S0xA1 modules with cascade and test ports |
| **Environmental** |              |
| 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 |
| **Optical (all models)** |              |
| Return loss, min | 45 dB  
Polarization dependent loss, max (typ) | 0.2 (0.1) dB  
Ripple within passband, max | 0.5 dB  
Channel spacing | 100 GHz (ITU grid)  
Wavelength passthrough | 1420–1610 nm |
| Insertion losses, max² (dB) |              |
| **Mux Modules** |              |
| NP35M08S0xZ0 (No cascade; no test port) | 2.3  
NP35M08S0xA1 (with cascade and test ports) | 2.3  
NP35D08S0xZ0 (No cascade; no test port) | N/A  
NP35D08S0xA1 (with cascade and test ports) | N/A |
| **Demux Modules** |              |
| Ch yy INP to DWDM OUT | 2.3  
DWDM INP to Ch yy OUT | N/A  
Typed insertion loss² | 3.1  
DWDM OUT to -20 dB Tap Ratio, max¹ (dB) | N/A  
Uniformity, max² (dB) | 1.6  
Module | 1.6  
Paired | 1.0  
Passband @ 0.5 dB (nm) | ± 0.12  
Directivity, input ports, min (dB) | 55  
Directivity, pass-through port, min (dB) | N/A  
Isolation, adjacent channel, min (dB) | N/A  
Isolation, non-adjacent channel, min (dB) | N/A  
Power handling, any input port, max (dBm) | 21.8  
Optical Interface |              |
| Optical connectors | 5C/APC  
Model NP35M08S0xZ0 (for x = 2 or 4) | Ch yy (8 channel add inputs for Custom Channel Group x)  
Model NP35D08S0xZ0 (for x = 2 or 4) | DWDM INP (input from fiber network or previous demux)  
Model NP35M08S0xA1 (for x = 2 or 4) | Ch yy (8 channel drop outputs for Custom Channel Group x)  
Model NP35D08S0xA1 (for x = 2 or 4) | DWDM INP (input from previous mux)  
Ch. yy (8 channel add inputs for Custom Channel Group x)  
DWDM OUT (output to fiber network or next mux)  
TP –20 dB (1% tap, test point from DWDM OUT)  
Model NP35D08S0xA1 (for x = 2 or 4) | DWDM INP (input from fiber network or previous demux)  
Ch. yy (8 channel drop outputs for Custom Channel Group x)  
DWDM OUT (to next demux)  
TP –20 dB (1% tap, test point from DWDM INP) |

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**Fiber-Deep**

**DOCSIS® 3.1**

**Node Segmentation**

**HPON™/RFoG**

**FTTx**

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Ask us about the complete Access Technologies Solutions portfolio:
SPECIFICATIONS CONTINUED

ARIS 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). NP35M08 and NP35D08 8-channel Optical Mux and
Demux Modules are identified with the following custom 8-channel group keys for the ITU channels shown
for each:
- CF2: ITU Channels 20, 21, 24, 29, 35, 42, 52, and 54
- CF4: ITU Channels 23, 33, 44, 47, 51, 57, 58, and 59

NOTES:
1. Including connectors;
2. Paired insertion loss when combined with 8-ch demux module from Ch. yy INP to Ch. yy OUT, and vice-versa

ORDERING INFORMATION

* Device type = M (multiplexer); = D (de-multiplexer)
* Channel group number
  = 2 (CF2 [ITU channels 20, 21, 24, 29, 35, 42, 52, and 54]);
  = 4 (CF4 [ITU channels 23, 33, 44, 47, 51, 57, 58, and 59])
* = A (cascade ports present); = Z (no cascade port)
* = 0 (no test point); = 1 (single bidirectional test point); = 3
  (forward unidirectional test point)
* Filter grade = 1 (for fewer than 30 analog channels); = 2 (for
  fewer than 79 analog channels), or = 3 (for all-QAM RF payload)
* Optical connector option = S (SC/APC); = L (LC/APC)

RELATED PRODUCTS

<table>
<thead>
<tr>
<th>CH3000 Chassis</th>
<th>Optical Patch Cords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Transmitters</td>
<td>Optical Passives</td>
</tr>
<tr>
<td>PF3000</td>
<td></td>
</tr>
</tbody>
</table>

Customer Care

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

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