

Optical Passives (ISP)

OP35M4x, OP35D4x

DWDM Mux and Demux Modules

4 Channels on 100 GHz-spaced ITU Grid

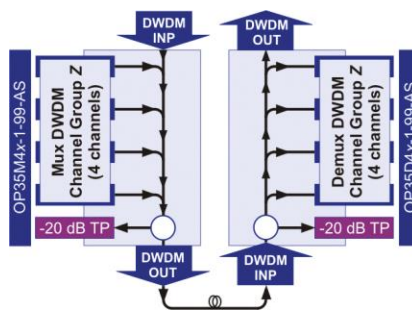
FEATURES

- 4-channel optical mux and demux modules with cascade ports for daisy-chaining of multiple modules
- Channels spaced on standard 100 GHz DWDM ITU grid
- Flat-top passband
- High optical isolation
- Supports both forward and return path transmission of analog and digital signals
- Mux and demux pairs optimized for minimum combined insertion loss across all channels
- SC/APC connectors ensure performance repeatability, compatibility, and easy installation and maintenance
- Optional line monitoring tap (-20 dB from mux output or demux input)
- Industry's highest packaging density (up to 32 modules per chassis)
- Occupies one half-depth slot
- LGX chassis-compatible



PRODUCT OVERVIEW

ARRIS's OP35M4x and OP35D4x series 4-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. In many of ARRIS's products, these channels are logically partitioned into groups of 4, 8, or 16 channels (with letters used to designate channel groups). That concept is employed in the OP35M4x and OP35D4x series of 4-channel mux and demux modules.



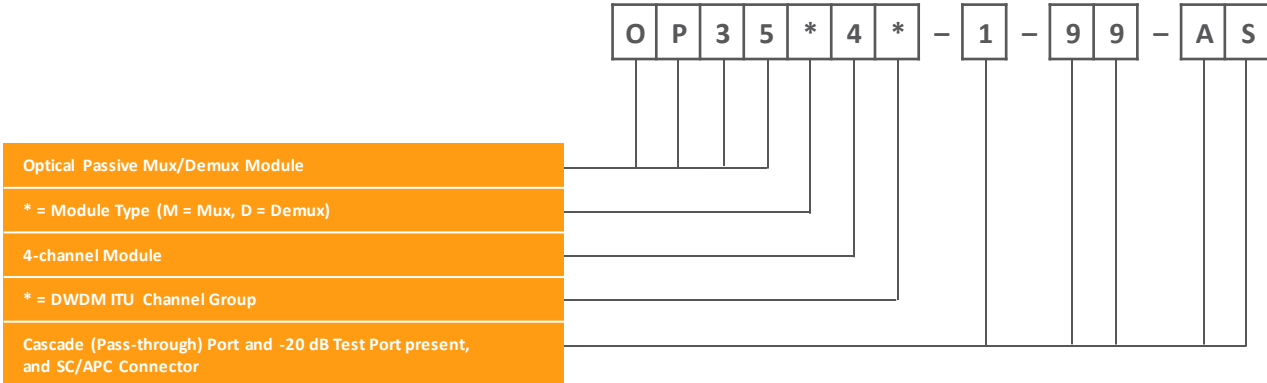
SPECIFICATIONS

| Characteristics | Specification | |
|---|---|---------------------------------------|
| Physical | | |
| Dimensions | 6.5" D x 5.3" H x 1.0" W (3RU) (16.5 cm x 13.5 cm x 2.5 cm) | |
| Weight | 0.8 lbs (0.4 kg) | |
| 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 | 0.2 dB (<0.1 dB typ) | |
| Ripple within passband | 0.5 dB | |
| Channel spacing | 100 GHz (ITU grid) | |
| Power handling, max (any input port) | 24.8 dBm | |
| Wavelength passthrough | 1420-1610 nm | |
| Insertion losses, max ¹ (dB) | Mux Module | Demux Module |
| | OP35M4x-1-99-AS (with -20 dB T.P.) | OP35D4x-1-99-AS (with -20 dB T.P.) |
| Ch.. yy INP to DWDM OUT | 1.8 | N/A |
| DWDM INP to Ch. yy OUT | N/A | 1.8 |
| Paired insertion loss ² | 2.9 | 2.9 |
| DWDM INP to DWDM OUT | 1.4 | 1.4 |
| DWDM OUT to -20 dB Tap Ratio, max ¹ (dB) | 20.4 | 20.4 |
| Uniformity, max ¹ (dB) | | |
| Module | 0.8 | 0.8 |
| Paired | 0.6 | 0.6 |
| Passband @ 0.5 dB (nm) | ± 0.12 | ± 0.12 |
| Directivity, input ports, min (dB) | 55 | N/A |
| Directivity, pass-through port, min (dB) | 45 | N/A |
| Isolation, adjacent channel, min (dB) | N/A | 30 |
| Isolation, non-adjacent channel, min (dB) | N/A | 45 |
| Optical Interface | | |
| Optical connectors | SC/APC | |
| Model OP35M4x-1-99-AS | <ul style="list-style-type: none"> DWDM INP (input from previous mux) Ch. yy (4 channel add inputs for Channel Group x) DWDM OUT (output to fiber network or next mux) TP -20 dB (1% tap, test point from DWDM OUT) | |
| Model OP35D4x-1-99-AS | <ul style="list-style-type: none"> DWDM INP (input from fiber network or previous demux) Ch. yy (4 channel drop outputs for Channel Group x) DWDM OUT (to next demux) TP -20 dB (1% tap, test point from DWDM INP) | |

NOTES:

- Including connectors;
- Paired insertion loss when combined with 4-ch demux module from Ch. yy INP to Ch. yy OUT, and vice-versa

ORDERING INFORMATION



Note:

Mux and demux modules are available for Channel Groups J, K, L, M, N, P, R, S, T, and U. Please refer to the ARRIS DWDM ITU Grid Channel Plan data sheet for a complete description of the channels included in these groups.

RELATED PRODUCTS

| | |
|----------------------|-----------------------|
| CH3000 Chassis | Optical Patch Cords |
| Optical Transmitters | Optical Passives |
| HPON™ | 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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