

# Optical Passives (ISP)

OP35M8-CFx-0-00-AS, OP35D8-CFx-0-00-AS  
DWDM Mux and Demux Modules  
8 Channels on 100 GHz-spaced ITU Grid

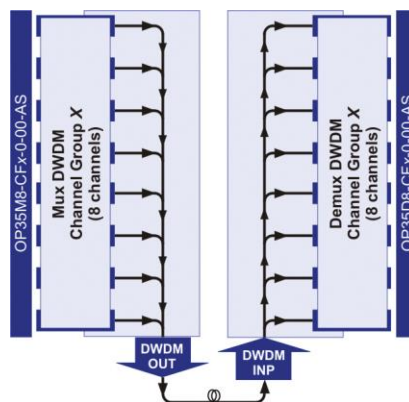
## FEATURES

- 8-channel optical mux and demux modules
- Groups of channels specifically selected for use with AT3545G series Full Spectrum DWDM Transmitters
- Flat-top passband
- High optical isolation
- 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
- Occupies single half-depth slot
- Industry's highest packaging density (up to 32 modules per chassis)
- LGX chassis-compatible



## PRODUCT OVERVIEW

ARRIS's OP35M8-CFx-0-00-AS and OP35D8-CFx-0-00-AS 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.



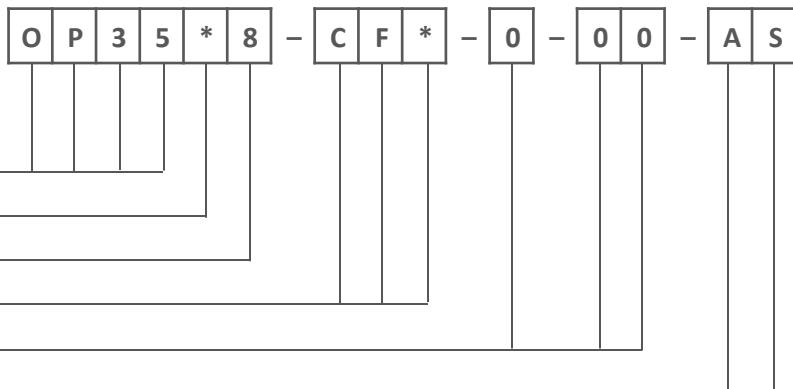
## SPECIFICATIONS

| Characteristics                           | Specification   |                     |
|---|---|---------------------|
| <b>Physical</b>                           |   |                     |
| 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                                    | 1.2 lbs (0.5 kg)  |                     |
| <b>Environmental</b>                      |   |                     |
| 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  |                     |
| <b>Optical (all models)</b>               |   |                     |
| 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)  |                     |
| Wavelength passthrough                    | 1420–1610 nm  |                     |
| Insertion losses, max <sup>1</sup> (dB)   | <b>Mux Module</b>   | <b>Demux Module</b> |
|   | OP35M8-CFx-0-00-AS  | OP35D8-CFx-0-00-AS  |
| Ch yy INP to DWDM OUT                     | 2.3   | N/A                 |
| DWDM INP to Ch yy OUT                     | N/A   | 2.3                 |
| Paired insertion loss <sup>2</sup>        | 3.1   | 3.1                 |
| Uniformity, max <sup>1</sup> (dB)         |   |                     |
| Module                                    | 1.6   | 1.8                 |
| Paired                                    | 1.0   | 1.0                 |
| Passband @ 0.5 dB (nm)                    | ± 0.12  | ± 0.12              |
| Directivity, input ports, min (dB)        | 55  | N/A                 |
| Isolation, adjacent channel, min (dB)     | N/A   | 30                  |
| Isolation, non-adjacent channel, min (dB) | N/A   | 45                  |
| Power handling, any input port, max (dBm) | 21.8  | 24.8                |
| <b>Optical Interface</b>                  |   |                     |
| Optical connectors                        | SC/APC  |                     |
| Model OP35M8-CFx-0-00-AS (for x = 2 or 4) | <ul style="list-style-type: none"> <li>Ch yy (8 channel add inputs for Custom Channel Group x)</li> <li>DWDM OUT (output to fiber network or next mux)</li> </ul>   |                     |
| Model OP35D8-CFx-0-00-AS (for x = 2 or 4) | <ul style="list-style-type: none"> <li>DWDM INP (input from fiber network or previous demux)</li> <li>Ch yy (8 channel drop outputs for Custom Channel Group x)</li> </ul>  |                     |
| <b>ITU Channel Plans</b>                  |   |                     |
|   | ARRIS 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). OP35M8-CFx-0-00-AS and OP35D8-CFx-0-00-AS 8-channel Optical Mux and Demux Modules are identified with the following custom 8-channel group keys for the ITU channels shown for each: <ul style="list-style-type: none"> <li>CF2 ITU Channels 20, 21, 24, 29, 35, 42, 52, and 54</li> <li>CF4 ITU Channels 23, 33, 44, 47, 51, 57, 58, and 59</li> </ul> |                     |

**NOTES:**

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

**ORDERING INFORMATION**



- Optical Passive DWDM Mux/Demux Module
- \* = Module Type (M = Mux, D = Demux)
- 8-channel Module
- CF\* = Custom DWDM ITU Channel Group Key (\* = 2, or 4)
- 0-00 = No Cascade (Pass-through) Port or -20 dB Test Port
- SC/APC Connectors

**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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