Optical Passives (ISP)



OP35M8-CFx-1-99-AS, OP35D8-CFx-1-99-AS DWDM Mux and Demux Modules 8 Channels on 100 GHz-spaced ITU Grid (with –20 dB Line Monitoring Taps and Cascade Ports)

FEATURES

- 8-channel optical mux and demux modules with line monitoring taps (-20 dB from mux output or demux input) and cascade ports
- 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 two half-depth slots
- Industry's highest packaging density (up to 16 modules per chassis)
- LGX chassis-compatible



PRODUCT OVERVIEW

The ARRIS OP35M8-CFx-1-99-AS and OP35D8-CFx-1-99-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, as well as included cascade ports and line monitoring taps.

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ISP-OP35M8/D8

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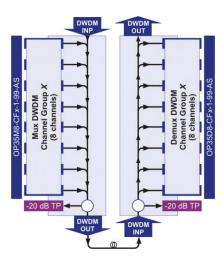
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Node Segmentation

HPON[™]/RFoG





SPECIFICATIONS

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Characteristics	Specification					
Physical						
Dimensions	6.5" D x 5.3" H x 2.0" W (3RU) (16.5 cm x 13.5 cm x 5.1 cm)					
Weight	1.2 lbs (0.54 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 (dB)	45					
Polarization dependent loss, max (typ) (dB)	0.2 (0.1)					
Ripple within passband, max	0.5 dB					
Channel spacing	100 GHz (ITU grid)					
Wavelength passthrough	1420–1610 nm					
Insertion losses, max ¹ (dB)	Mux Module	Demux Module				
	OP35M8-CFx-1-99-AS	OP35D8-CFx-1-99-AS				
	(with –20 dB T.P.)	(with –20dB T.P.)				
Ch. yy INP to DWDM OUT	2.3	N/A				
DWDM INP to Ch. yy OUT	N/A	2.3				
Paired insertion loss ²	3.1	3.1				
DWDM OUT to -20 dB Tap Ratio, max ¹ (dB)	20.4	20.4				
Uniformity, max ¹ (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				
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				
Power handling, any input port, max (dBm)	21.8	24.8				
Optical Interface						
Optical connectors	SC/APC					
Model OP35M8-CF <i>x</i> -1-99-AS (for <i>x</i> = 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 OP35D8-CFx-1-99-AS (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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SPECIFICATIONS CONTINUED

ITU Channel Plans

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-1-99-AS and OP35D8-CFx-1-99-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: • CF2 ITU Channels 20, 21, 24, 29, 35, 42, 52, and 54

CF2 IIU Channels 20, 21, 24, 29, 35, 42, 52, and 54
 CF4 ITU Channels 22, 22, 44, 47, 54, 57, 59, 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

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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)										_								
1–99 = Cascade (Pass-through) Port or –20 dB Test Port included																		
AS = SC/APC Connector																		

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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87-10548-RevC OP35M8-D8-CFx-1-99-AS DWDM-Mux-De mux

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