Optical Passives (ISP)

NP35M08, NP35D08

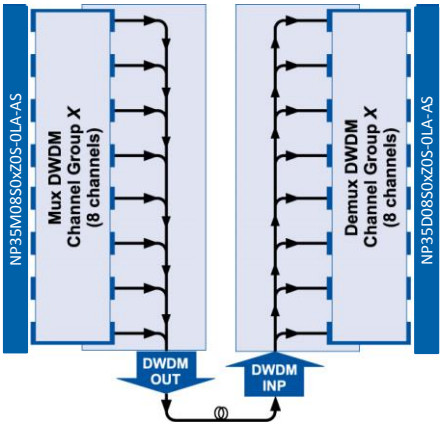
DWDM Mux and Demux Modules
8 Channels on 100 GHz-spaced ITU Grid
(with –20 dB Line Monitoring Taps and Cascade Ports)

FEATURES

- 8-channel optical mux and demux modules
- 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 pair optimized for minimum combined insertion loss across all channels
- SC/APC connectors ensure performance repeatability, compatibility, and easy installation and maintenance
- Industry's highest packaging density (up to 32 modules per chassis)
- Occupies one half-depth slot
- Telcordia GR-1209 and GR-1221 qualified
- LGX chassis-compatible
- Replaces OP35M8 and OP35D8

PRODUCT OVERVIEW

The ARRIS 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. 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). This concept is employed in the NP35M08 and NP35D08 series of 8-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	1.2 lbs (0.5 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	
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, max[1] (dB)	**Mux Module**	**Demux Module**
	NP35M08	NP35D08
Ch *yy* INP to DWDM OUT	2.6	N/A
DWDM INP to Ch *yy* OUT	N/A	2.6
Paired insertion loss[2]	3.5	3.5
Uniformity, max[1] (dB)		
Module	1.8	1.8
Paired	1.2	1.2
Passband @ 0.5 dB (nm)	± 0.12	± 0.12
Directivity, 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
Optical Interface		
Optical connectors	SC/APC	
Model NP35M08S0xZ0S-0LA-AS	• Ch *yy* INP (8 channel add inputs for Channel Group *x*) • DWDM OUT (output to fiber network)	
Model NP35M08S0xA1S-0LA-AS	• DWDM INP (input from previous mux) • Ch *yy* INP (8 channel add inputs for Channel Group *x*) • DWDM OUT (output to fiber network) • TP –20 dB (1% tap, test point from DWDM OUT)	
Model NP35D08S0xZ0S-0LA-AS	• DWDM INP (input from fiber network) • Ch *yy* (8 channel drop outputs for Channel Group *x*)	
Model NP35D08S0xA1S-0LA-AS	• DWDM INP (input from fiber network) • Ch *yy* INP (8 channel add inputs for Channel Group *x*) • DWDM OUT (output to next demux) • TP –20 dB (1% tap, test point from DWDM OUT)	

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

N	P	3	5	*	0	8	S	0	*	*	*	S	–	0	L	A	–	A	S

- * = Module Type (M = Mux, D = Demux)
- * = DWDM ITU Channel Group K, M, P, S, or U (See tables below.)
- ** = Optional cascade and test point ports (Z0 = No cascade, no test point; A1 = with cascade and test point ports)

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
K	Channel # 20	1561.419	192.0
	Channel # 21	1560.606	192.1
	Channel # 22	1559.794	192.2
	Channel # 23	1558.983	192.3
	Channel # 24	1558.173	192.4
	Channel # 25	1557.363	192.5
	Channel # 26	1556.555	192.6
	Channel # 27	1555.747	192.7
M	Channel # 28	1554.940	192.8
	Channel # 29	1554.134	192.9
	Channel # 30	1553.329	193.0
	Channel # 31	1552.524	193.1
	Channel # 32	1551.721	193.2
	Channel # 33	1550.918	193.3
	Channel # 34	1550.116	193.4
	Channel # 35	1549.315	193.5
P	Channel # 36	1548.515	193.6
	Channel # 37	1547.715	193.7
	Channel # 38	1546.917	193.8
	Channel # 39	1546.119	193.9
	Channel # 40	1545.322	194.0
	Channel # 41	1544.526	194.1
	Channel # 42	1543.730	194.2
	Channel # 43	1542.936	194.3

Channel Group	ITU Channel #	Wavelength (nm)	Optical frequency (THz)
S	Channel # 44	1542.142	194.4
	Channel # 45	1541.349	194.5
	Channel # 46	1540.557	194.6
	Channel # 47	1539.766	194.7
	Channel # 48	1538.976	194.8
	Channel # 49	1538.186	194.9
	Channel # 50	1537.397	195.0
	Channel # 51	1536.609	195.1
U	Channel # 52	1535.822	195.2
	Channel # 53	1535.036	195.3
	Channel # 54	1534.250	195.4
	Channel # 55	1533.465	195.5
	Channel # 56	1532.681	195.6
	Channel # 57	1531.898	195.7
	Channel # 58	1531.116	195.8
	Channel # 59	1530.334	195.9

RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
PF3000	LGX Chassis

Customer Care

Contact Customer Care for product information and sales:

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