8, 10, 20, and 40-channel ISP DWDM Demuxes

FEATURES

- 8-, 10-, 20-, and 40-channel optical demultiplexer modules
- Indoor demux companions to CommScope's outdoor DP95M or indoor DP35M series DWDM mux cassettes
- LGX chassis-compatible for inside-plant controlled indoor environments
- 100 GHz DWDM ITU channel spacing (ITU-T G694.1)
- EXP express port for dropping wavelengths outside the DWDM C band (available for selected models)
- UPG upgrade port for cascading with other DWDM de-multiplexers (available for selected models)
- Separate -20 dB test ports for Tx and Rx signal monitoring (available for selected models)
- LC/APC or LC/UPC connectors options

CommScope DP35D-Series DWDM optical demuxes are intended for applications in controlled indoor environments. They are typically paired with compatible DP95M-Series outdoor or DP35M-Series indoor DWDM multiplexer modules.

The DP35D-Series is designed to de-multiplex 8, 10, 20, or 40 DWDM wavelengths with 100 GHz frequency spacing on the DWDM ITU Grid (ITU-T G.694.1). Selected models also have an EXP express port (for dropping other wavelengths outside the C-band), a UPG upgrade port (for daisy-chain cascading of other DWDM wavelengths), and separate -20 dB test port line monitoring taps (for Tx and Rx signal paths).

These modules are compatible with industry-standard LGX chassis.



SPECIFICATIONS

LGC Module xx = Channel Count Dimensions (mm) xx = 8 27 W x 163 D x 130 xx = 10 27 W x 163 D x 130 xx = 20 52 W x 163 D x 130 xx = 40 52 W x 163 D x 130 1.5 lbs (0.68 kg)	H (1-slot wide) H (2-slot wide)	
xx = Channel Count Dimensions (mm) xx = 8 27 W x 163 D x 130 xx = 10 27 W x 163 D x 130 xx = 20 52 W x 163 D x 130 xx = 40 52 W x 163 D x 130	H (1-slot wide) H (2-slot wide)	
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xx = 10 27 W x 163 D x 130 xx = 20 52 W x 163 D x 130 xx = 40 52 W x 163 D x 130	H (1-slot wide) H (2-slot wide)	
xx = 20 52 W x 163 D x 130 xx = 40 52 W x 163 D x 130	H (2-slot wide)	
xx = 40 52 W x 163 D x 130		
1.5 lbs (0.68 kg)	H (2-slot wide)	
-20° to +65°C (-4° to +149°F)		
-40° to +85°C (-40° to +185°F)		
5% to 95% non-condensing		
 DWDM ITU channel output ports (See Table 2) COM: Input from fiber network EXP (if applicable): Express port to cascade wavelengths outside DWDM ITU 16-63 UPG (if applicable): Upgrade port to cascade DWDM channels from another DWDM demux TP-Tx (if applicable): Unidirectional -20 dB tap off COM TP-Rx (if applicable): Unidirectional -20 dB tap off COM 		
LC/APC LC/UPC		
,		
100 GHz grid (ITU-T G.694.1)		
 COM to Channel xx: Center wavelength +/- 0.125 mm COM to UPG: 1527.22–1564.68. ITU channels 16-63 COM to EXP: 1260-1520 and 1570-1635 		
 COM to Channel xx: (See Table 1) Paired: (See Table 1) COM to UPG: (See Table 1) COM to EXP: 3 dB COM to TP-Tx: 20.4 COM to TP-Rx: 20.4 		
2 dB		
1 dB	1 dB	
0.5 dB		
Adjacent channels, min (COM to xx): 30 dB Non-adjacent channels, min (COM to xx): 45 dB Non-adjacent channels, min (COM to EXP): 12 dB		
45 dB		
0.25 dB		
0.002/°C		
0.01 dB/°C		
21.8 dBm		
	1.5 lbs (0.68 kg) -20° to +65°C (-4° to +149°F) -40° to +85°C (-40° to +185°F) 5% to 95% non-condensing • DWDM ITU channel output ports (See Table 2) • COM: Input from fiber network • EXP (if applicable): Express port to cascade wave • UPG (if applicable): Upgrade port to cascade DW • TP-Tx (if applicable): Unidirectional -20 dB tap of • TP-Rx (if applicable): Unidirectional -20 dB tap of • LC/APC • LC/UPC 100 GHz grid (ITU-T G.694.1) • COM to Channel xx: Center wavelength +/- 0.125 • COM to UPG: 1527.22–1564.68. ITU channels 16 • COM to EXP: 1260-1520 and 1570-1635 • COM to Channel xx: (See Table 1) • Paired: (See Table 1) • COM to EXP: 3 dB • COM to TP-Tx: 20.4 • COM to TP-Rx: 20.4 2 dB 1 dB 0.5 dB Adjacent channels, min (COM to xx): 30 dB Non-adjacent channels, min (COM to EXP): 12 dB 45 dB 0.25 dB 0.002/°C 0.01 dB/°C	

TABLE 1: INSERTION LOSS¹ (dB), DP35DXX

Model Type	Channel Count	Channel Input to COM	Paired Loss ²	COM to UPG
DP35D08S0iB2S (i = V, W, or X)	8	3.3	5.2 ³	3.1
DP35D10S0iA1S (i = 2, 3, 4, or 5)	10	2.9	4.0 ⁴ 3.8 ⁵	2.7
DP35D20S0iB2S (i = N or U)	20	4.7	6.6 ⁶	4.2
DP35D40S0UB2S-0LB (with EXP and UPG and two uni-directional test ports; based on thin-film filter technology)	40	5.5	7.4 ⁷ 6.9 ⁸	5.0
DP35D40S0UZ0S-0LB (with no EXP or UPG or test port; based on thin-film filter technology)	40	4.4	6.9 ⁹ 5.3 ¹⁰	N/A
DP35D40S0UZ0S-OLN (with no EXP or UPG or test port; based on arrayed waveguide technology)	40	4.3	8.9 ¹¹ 9.4 ¹²	N/A

NOTES

- 1. These specifications include optical connector losses.
- 2. Insertion loss between multiplexer channel input and the corresponding de-mulitplexer channel output for the specified pairings in the footnotes below.
- 3. DP35D08S0iB2S demux/DP35M08S0iB2S mux pair
- 4. DP35D10S0iA1S demux/DP35M10S0iA1S mux pair
- 5. DP35D10S0iA1S demux/DP95M10S0iA0S mux pair (Subtract 0.1 dB per connector for outdoor devices with no connector.)
- 6. DP35D20S0iB2S demux/DP35M20S0iB2S or DP95M20S0iB2S mux pair (Subtract 0.1 dB per connector for outdoor devices with no connector.)
- 7. DP35D40S0UB2S-0LB demux/DP35M40S0UB2S-0LB mux pair
- 8. DP35D40S0UB2S-0LB demux/DP35M40S0UZ0S-0LB mux pair
- 9. DP35D40S0UZ0S-0LB demux/DP35M40S0UB2S-0LB mux pair
- $10.\mathsf{DP35D40S0UZ0S}\text{-}\mathsf{OLB}\;\mathsf{demux/DP35M40S0UZ0S}\text{-}\mathsf{OLB}\;\mathsf{mux}\;\mathsf{pair}$
- 11.DP35D40S0UZ0S-0LN demux/DP35M40S0UZ0S-0LN mux pair
- 12.DP35D40S0UZ0S-0LN demux/DP95M40S0UZ2S-0LN mux pair (Subtract 0.1 dB per connector for outdoor devices with no connector.)

TABLE 2: ITU-T G.694-1 WAVELENGTH TABLE AND CORRESPONDING DP35DXX MODELS

			ITU Chann	el Plan		
8-channel DP35D08S0y, y =	10-channel DP35D10S0y, y =	20-channel DP35D20S0y, y =	40-channel DP35D10S0y, y =	Channel #	Optical Frequency (THz)	Wavelength (nm)
,	,	y –	,	20	192.0	1561.419
				21	192.1	1560.606
				22	192.2	1559.794
V				23	192.3	1558.983
				24	192.4	1558.173
v	2			25	192.5	1557.363
(Channels				26	192.6	1556.555
2, 25, 26, 27,				27	192.7	1555.747
8, 30, 31, 32)				28	192.8	1554.940
				29	192.9	1554.134
		N		30	193.0	1553.329
				31	193.1	1552.524
				32	193.2	1551.721
				33	193.3	1550.918
				34	193.4	1550.116
	3		-	35	193.5	1549.315
W (Channels				36	193.6	1548.515
			_	37	193.7	1547.715
			-	38	193.8	1546.917
				39	193.9	1546.119
4, 36, 37, 38,			U	40	194.0	1545.322
9, 40, 41, 43)				41	194.1	1544.526
				42	194.2	1543.730
	4			43	194.3	1542.936
				44	194.4	1542.142
				45	194.5	1541.349
				46	194.6	1540.557
				47	194.7	1539.766
				48	194.8	1538.976
X				49	194.9	1538.186
		U		50	195.0	1537.397
(Channels				51	195.1	1536.609
45, 46, 48, 49, 50, 53, 55, 56)				52	195.2	1535.822
		5		53	195.3	1535.036
	_			54	195.4	1534.250
	5			55	195.5	1533.465
				56	195.6	1532.681
			57	195.7	1531.898	
				58	195.8	1531.116
				59	195.9	1530.334

ORDERING INFORMATION

Model Name	Description	
DP35D08S0iB2S-0LB-yz	8-channel de-multiplexer with EXP and UPG ports and two uni-directional test ports i = V, W, or X (See Table 2 for definitions of ITU channel groups.) yz = UL (LC/UPC connectors)	
DP35D10S0iA1S-0LC-yz	10-channel de-multiplexer with UPG port and one bi-directional test port i = 2, 3, 4, or 5 (See Table 2 for definitions of ITU channel groups.) yz = AL (LC/APC connectors) or UL (LC/UPC connectors)	
DP35D20S0iB2S-0LB-yz	20-channel de-multiplexer with EXP and UPG ports and two uni-directional test ports i = N or U (See Table 2 for definitions of ITU channel groups.) yz = AL (LC/APC connectors) or UL (LC/UPC connectors)	
DP35D40S0UB2S-0LB-yz	40-channel de-multiplexer with EXP and UPG ports and two uni-directional test ports (See Table 2 for definition of ITU channel group U.) yz = AL (LC/APC connectors) or UL (LC/UPC connectors)	
DP35D40S0UZ0S-0Lt-yz	40-channel de-multiplexer with no EXP or UPG port and no test port (See Table 2 for definition of ITU channel group U.) t = B (thin-film filter technology) or N (Arrayed Waveguide technology) yz = AL (LC/APC connectors) or UL (LC/UPC connectors)	

RELATED PRODUCTS

DP95M-Series OSP DWDM multiplexer modules	DP35M-Series ISP DWDM mux cassettes
SFPs	Industry-standard LGX chassis
Fiber Service Cable	Installation Services

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 $\textbf{Note:} \ \mathsf{Specifications} \ \mathsf{are} \ \mathsf{subject} \ \mathsf{to} \ \mathsf{change} \ \mathsf{without} \ \mathsf{notice}.$

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1511828-RevD_DP35Dxx_DWDM-8-10-20-40-ch-DEMUX

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