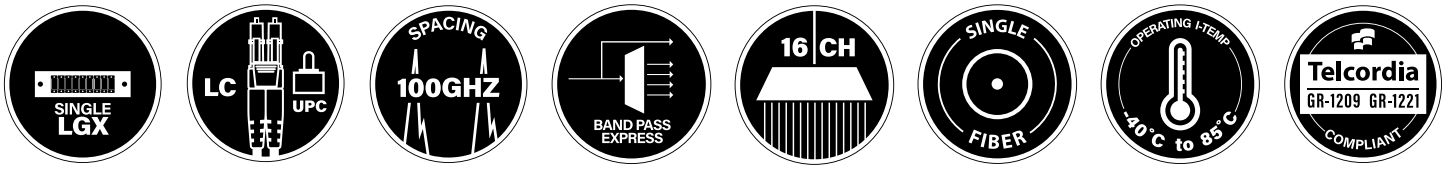
Features:

- 16 Channel Single Fiber DWDM Mux + EXP for 8 Skip 1 Channel Plan
- Channel Wavelengths: DWDM CH. 25 to CH. 32 + CH. 34 to CH. 41 + EXP
- Channel Spacing: 100GHz
- Reliability: Telcordia GR-1209, GR-1221
- Maximum Optical Power: 300mW
- Connector Type - All Ports: LC/UPC
- Operating Temperature: -40 to 85°C
- Storage Temperature: -40 to 85°C
- Dimensions: 100mm x 100mm x 28.5mm
- Faceplate: 130mm



1. Optical Requirements

Parameter	Value
Passband Width, Channel Ports at -0.5dB	ITU ≥ 25GHz
Passband Width, Channel Ports at -3dB	ITU ≥ 72.5GHz
Band Pass Express, Express Port	1250nm - 1675nm (see exclusions)
Band Pass Express Exclusions (Blocked Frequencies), (Min.)	CH. 24 to CH. 42, 1250nm to 1400nm, 1665nm to 1675nm
Passband Ripple (Max.)	≤ 0.5dB
Isolation, Adjacent Channel - DWDM (Min.)	≥ 30dB
Isolation, Non-Adjacent Channel - DWDM (Min.)	≥ 40dB
Isolation, Express Channel (Min.)	≥ 12dB
Return Loss - All Ports (Min., Including Connectors)	≥ 45dB
Directivity - DWDM Ports (Min.)	≥ 50dB
Polarization Dependent Loss (Max.)	≤ 0.2dB
Polarization Mode Dispersion (Max.)	≤ 0.2ps

2. Insertion Loss

Parameter	Value
DWDM Channel Insertion Loss (Typ., Incl. Connectors)	3.6dB
DWDM Channel Insertion Loss (Max., Incl. Connectors)	≤ 3.8dB
Express Insertion Loss (Typ., Incl. Connectors)	1.2dB
Express Insertion Loss (Max., Incl. Connectors)	≤ 1.4dB
MON Port Insertion Loss (Incl. Connectors)	22.8dB Rx/19.0dB Tx

3. Individual Channel Losses

Channel	Typical	Max
Ch. 25 Rx	1.8	2.0
Ch. 25 Tx	2.1	2.3
Ch. 27 Rx	2.4	2.6
Ch. 27 Tx	2.6	2.8
Ch. 29 Rx	2.8	3.0
Ch. 29 Tx	3.0	3.2
Ch. 31 Rx	3.2	3.4
Ch. 31 Tx	3.4	3.6
Ch. 34 Rx	2.1	2.3
Ch. 34 Tx	2.4	2.6
Ch. 36 Rx	2.6	2.8
Ch. 36 Tx	2.8	3.0
Ch. 38 Rx	3.0	3.2
Ch. 38 Tx	3.2	3.4
Ch. 40 Rx	3.4	3.6
Ch. 40 Tx	3.6	3.8
EXP	1.0	1.2

Features:

- 16 Channel Single Fiber DWDM Demux + EXP for 8 Skip 1 Channel Plan
- Channel Wavelengths: DWDM CH. 25 to CH. 32 + CH. 34 to CH. 41 + EXP
- Channel Spacing: 100GHz
- Reliability: Telcordia GR-1209, GR-1221
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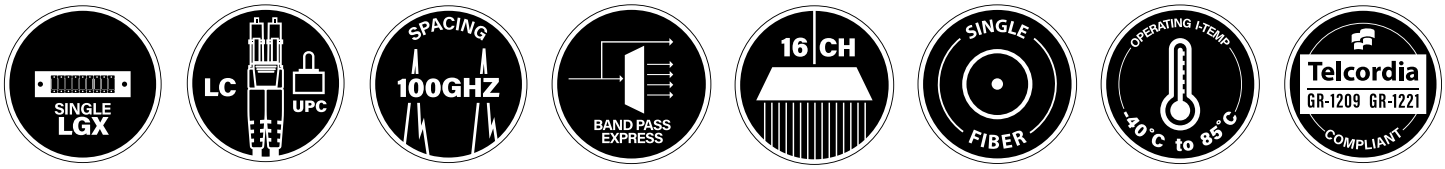

1. Optical Requirements

Parameter	Value
Passband Width, Channel Ports at -0.5dB	ITU ≥ 25GHz
Passband Width, Channel Ports at -3dB	ITU ≥ 72.5GHz
Band Pass Express, Express Port	1250nm - 1675nm (see exclusions)
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Isolation, Adjacent Channel - DWDM (Min.)	≥ 30dB
Isolation, Non-Adjacent Channel - DWDM (Min.)	≥ 40dB
Isolation, Express Channel (Min.)	≥ 12dB
Return Loss - All Ports (Min., Including Connectors)	≥ 45dB
Directivity - DWDM Ports (Min.)	≥ 50dB
Polarization Dependent Loss (Max.)	≤ 0.2dB
Polarization Mode Dispersion (Max.)	≤ 0.2ps

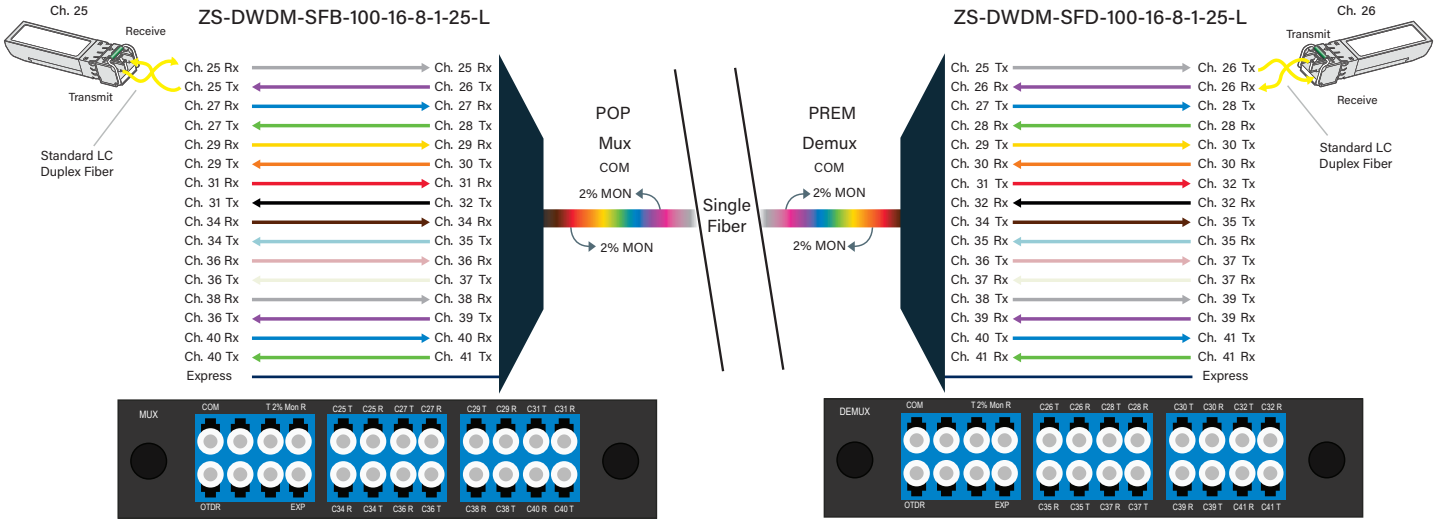
2. Insertion Loss

Parameter	Value
DWDM Channel Insertion Loss (Typ., Incl. Connectors)	3.6dB
DWDM Channel Insertion Loss (Max., Incl. Connectors)	≤ 3.8dB
Express Insertion Loss (Typ., Incl. Connectors)	1.2dB
Express Insertion Loss (Max., Incl. Connectors)	≤ 1.4dB
MON Port Insertion Loss (Incl. Connectors)	22.8dB Rx/19.0dB Tx

3. Individual Channel Losses

Channel	Typical	Max
Ch. 41 Rx	1.8	2.0
Ch. 41 Tx	2.1	2.3
Ch. 39 Rx	2.4	2.6
Ch. 39 Tx	2.6	2.8
Ch. 37 Rx	2.8	3.0
Ch. 37 Tx	3.0	3.2
Ch. 35 Rx	3.2	3.4
Ch. 35 Tx	3.4	3.6
Ch. 32 Rx	2.1	2.3
Ch. 32 Tx	2.4	2.6
Ch. 30 Rx	2.6	2.8
Ch. 30 Tx	2.8	3.0
Ch. 28 Rx	3.0	3.2
Ch. 28 Tx	3.2	3.4
Ch. 26 Rx	3.4	3.6
Ch. 26 Tx	3.6	3.8
EXP	1.0	1.2

4. Network Diagram



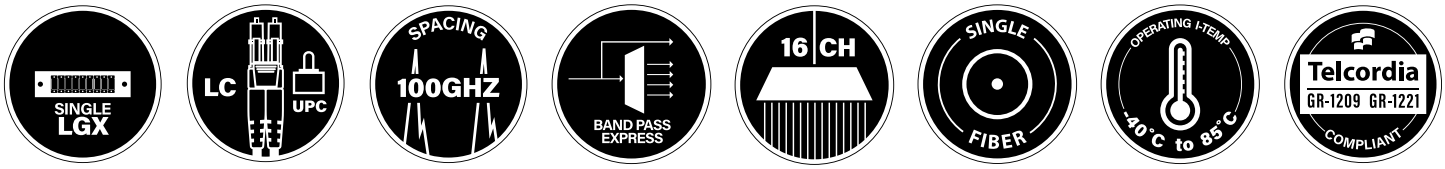
5. Link Path Chart

ZS-DWDM-SFB-100-16-8-1-25-L | ZS-DWDM-SFD-100-16-8-1-25-L

Transceiver	Transceiver Port		WDM Channel Label	WDM Port	WDM Internal Channel		One Single Fiber		WDM Internal Channel	WDM Port	WDM Channel Label		Transceiver Port	Transceiver
25	Tx	>	25	Rx	25	>		>	25	Tx	26	>	Rx	26
25	Rx	<	25	Tx	26	<		<	26	Rx	26	<	Tx	26
27	Tx	>	27	Rx	27	>		>	27	Tx	28	>	Rx	28
27	Rx	<	27	Tx	28	<		<	28	Rx	28	<	Tx	28
29	Tx	>	29	Rx	29	>		>	29	Tx	30	>	Rx	30
29	Rx	<	29	Tx	30	<		<	30	Rx	30	<	Tx	30
31	Tx	>	31	Rx	31	>		>	31	Tx	32	>	Rx	32
31	Rx	<	31	Tx	32	<		<	32	Rx	32	<	Tx	32
34	Tx	>	34	Rx	34	>		>	34	Tx	35	>	Rx	35
34	Rx	<	34	Tx	35	<		<	35	Rx	35	<	Tx	35
36	Tx	>	36	Rx	36	>		>	36	Tx	37	>	Rx	37
36	Rx	<	36	Tx	37	<		<	37	Rx	37	<	Tx	37
38	Tx	>	38	Rx	38	>		>	38	Tx	39	>	Rx	39
38	Rx	<	38	Tx	39	<		<	39	Rx	39	<	Tx	39
40	Tx	>	40	Rx	40	>		>	40	Tx	41	>	Rx	41
40	Rx	<	40	Tx	41	<		<	41	Rx	41	<	Tx	41

Features:

- 16 Channel Single Fiber DWDM Mux + EXP for 8 Skip 1 Channel Plan
- Channel Wavelengths: DWDM CH. 43 to CH. 50 + CH. 52 to CH. 59 + EXP
- Channel Spacing: 100GHz
- Reliability: Telcordia GR-1209, GR-1221
- Maximum Optical Power: 300mW
- Connector Type - All Ports: LC/UPC
- Operating Temperature: -40 to 85°C
- Storage Temperature: -40 to 85°C
- Dimensions: 100mm x 100mm x 28.5mm
- Faceplate: 130mm



1. Optical Requirements

Parameter	Value
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Passband Width, Channel Ports at -3dB	ITU ≥ 72.5GHz
Band Pass Express, Express Port	1250nm - 1675nm (see exclusions)
Band Pass Express Exclusions (Blocked Frequencies), (Min.)	CH. 42 to CH. 60, 1250nm to 1400nm, 1665nm to 1675nm
Passband Ripple (Max.)	≤ 0.5dB
Isolation, Adjacent Channel - DWDM (Min.)	≥ 30dB
Isolation, Non-Adjacent Channel - DWDM (Min.)	≥ 40dB
Isolation, Express Channel (Min.)	≥ 12dB
Return Loss - All Ports (Min., Including Connectors)	≥ 45dB
Directivity - DWDM Ports (Min.)	≥ 50dB
Polarization Dependent Loss (Max.)	≤ 0.2dB
Polarization Mode Dispersion (Max.)	≤ 0.2ps

2. Insertion Loss

Parameter	Value
DWDM Channel Insertion Loss (Typ., Incl. Connectors)	3.6dB
DWDM Channel Insertion Loss (Max., Incl. Connectors)	≤ 3.8dB
Express Insertion Loss (Typ., Incl. Connectors)	1.2dB
Express Insertion Loss (Max., Incl. Connectors)	≤ 1.4dB
MON Port Insertion Loss (Incl. Connectors)	22.8dB Rx/19.0dB Tx

3. Individual Channel Losses

Channel	Typical	Max
Ch. 43 Rx	1.8	2.0
Ch. 43 Tx	2.1	2.3
Ch. 45 Rx	2.4	2.6
Ch. 45 Tx	2.6	2.8
Ch. 47 Rx	2.8	3.0
Ch. 47 Tx	3.0	3.2
Ch. 49 Rx	3.2	3.4
Ch. 49 Tx	3.4	3.6
Ch. 52 Rx	2.1	2.3
Ch. 52 Tx	2.4	2.6
Ch. 54 Rx	2.6	2.8
Ch. 54 Tx	2.8	3.0
Ch. 56 Rx	3.0	3.2
Ch. 56 Tx	3.2	3.4
Ch. 58 Rx	3.4	3.6
Ch. 58 Tx	3.6	3.8
EXP	1.0	1.2

Features:

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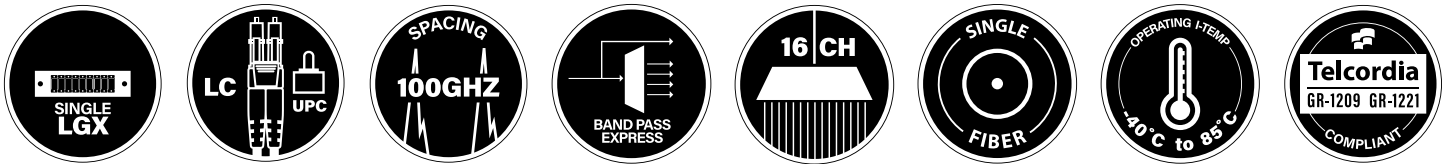

1. Optical Requirements

Parameter	Value
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Isolation, Express Channel (Min.)	≥ 12dB
Return Loss - All Ports (Min., Including Connectors)	≥ 45dB
Directivity - DWDM Ports (Min.)	≥ 50dB
Polarization Dependent Loss (Max.)	≤ 0.2dB
Polarization Mode Dispersion (Max.)	≤ 0.2ps

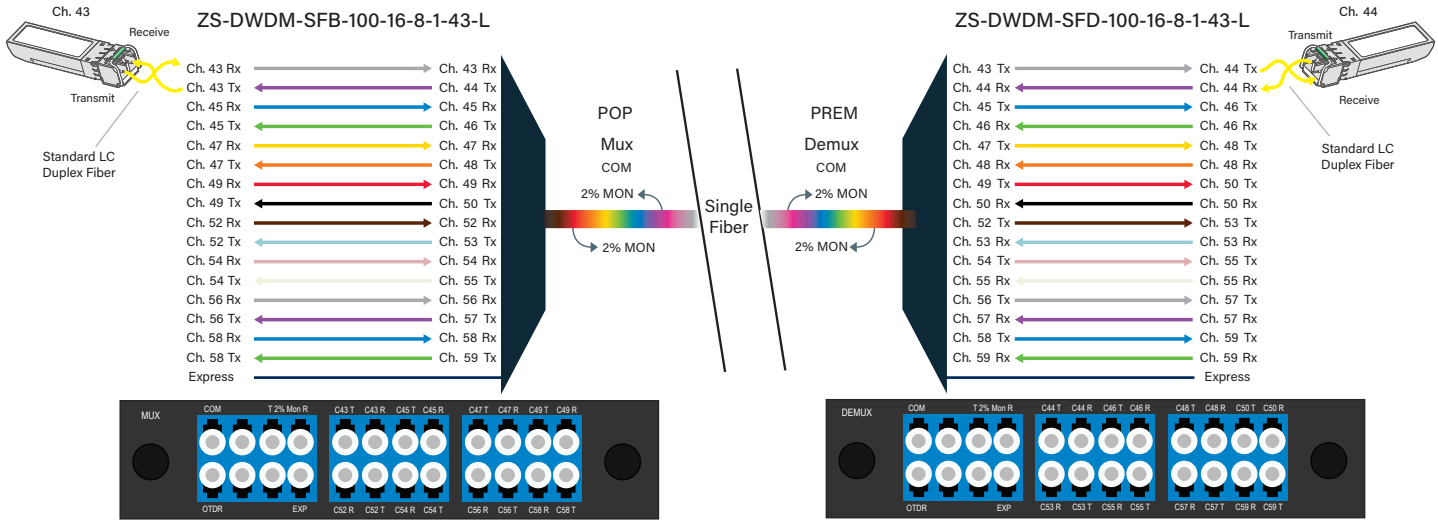
2. Insertion Loss

Parameter	Value
DWDM Channel Insertion Loss (Typ., Incl. Connectors)	3.6dB
DWDM Channel Insertion Loss (Max., Incl. Connectors)	≤ 3.8dB
Express Insertion Loss (Typ., Incl. Connectors)	1.2dB
Express Insertion Loss (Max., Incl. Connectors)	≤ 1.4dB
MON Port Insertion Loss (Incl. Connectors)	22.8dB Rx/19.0dB Tx

3. Individual Channel Losses

Channel	Typical	Max
Ch. 59 Rx	1.8	2.0
Ch. 59 Tx	2.1	2.3
Ch. 57 Rx	2.4	2.6
Ch. 57 Tx	2.6	2.8
Ch. 55 Rx	2.8	3.0
Ch. 55 Tx	3.0	3.2
Ch. 53 Rx	3.2	3.4
Ch. 53 Tx	3.4	3.6
Ch. 50 Rx	2.1	2.3
Ch. 50 Tx	2.4	2.6
Ch. 48 Rx	2.6	2.8
Ch. 48 Tx	2.8	3.0
Ch. 46 Rx	3.0	3.2
Ch. 46 Tx	3.2	3.4
Ch. 44 Rx	3.4	3.6
Ch. 44 Tx	3.6	3.8
EXP	1.0	1.2

3. Network Diagram



4. Link Path Chart

ZS-DWDM-SFB-100-16-8-1-43-L | ZS-DWDM-SFD-100-16-8-1-43-L

Transceiver	Transceiver Port		WDM Channel Label	WDM Port	WDM Internal Channel		One Single Fiber		WDM Internal Channel	WDM Port	WDM Channel Label		Transceiver Port	Transceiver
43	Tx	>	43	Rx	43	>		>	43	Tx	44	>	Rx	44
43	Rx	<	43	Tx	44	<		<	44	Rx	44	<	Tx	44
45	Tx	>	45	Rx	45	>		>	45	Tx	46	>	Rx	46
45	Rx	<	45	Tx	46	<		<	46	Rx	46	<	Tx	46
47	Tx	>	47	Rx	47	>		>	47	Tx	48	>	Rx	48
47	Rx	<	47	Tx	48	<		<	48	Rx	48	<	Tx	48
49	Tx	>	49	Rx	49	>		>	49	Tx	50	>	Rx	50
49	Rx	<	49	Tx	50	<		<	50	Rx	50	<	Tx	50
52	Tx	>	52	Rx	52	>		>	52	Tx	53	>	Rx	53
52	Rx	<	52	Tx	53	<		<	53	Rx	53	<	Tx	53
54	Tx	>	54	Rx	54	>		>	54	Tx	55	>	Rx	55
54	Rx	<	54	Tx	55	<		<	55	Rx	55	<	Tx	55
56	Tx	>	56	Rx	56	>		>	56	Tx	57	>	Rx	57
56	Rx	<	56	Tx	57	<		<	57	Rx	57	<	Tx	57
58	Tx	>	58	Rx	58	>		>	58	Tx	59	>	Rx	59
58	Rx	<	58	Tx	59	<		<	59	Rx	59	<	Tx	59

5. Ordering Information

Root SKU	Part Number	Description
D4T16LC25080150	ZS-DWDM-SFB-100-16-8-1-25-L	DWDM SF MUX 100GHz 16Ch / 8Svcs LC, 8 Skip 1, Ch 25 start, Monitor, Exp, LGX
D5T16LC25080150	ZS-DWDM-SFD-100-16-8-1-25-L	DWDM SF DEMUX 100GHz 16Ch / 8Svcs LC, 8 Skip 1, Ch 25 start, Monitor, Exp, LGX
D4T16LC43080150	ZS-DWDM-SFB-100-16-8-1-43-L	DWDM SF MUX 100GHz 16Ch / 8Svcs LC, 8 Skip 1, Ch 43 start, Monitor, Exp, LGX
D5T16LC43080150	ZS-DWDM-SFD-100-16-8-1-43-L	DWDM SF DEMUX 100GHz 16Ch / 8Svcs LC, 8 Skip 1, Ch 43 start, Monitor, Exp, LGX

6. Contact Information

Tel: 800.590.9535
Web: http://www.approvednetworks.com