

PASSIVES DATA SHEET

4 Channel Dual Fiber DWDM Mux/Demux + Express for 8 Skip 1 Channel Plan



Champion ONE's DWDM passive networking products for inside and outside plant applications provide a cost-effective, high-reliability solution to fiber capacity challenges.

Technical Specifications

WAVELENGTH INFORMATION

Express port: 1470nm – 1620nm (excl. channel ports)
 DWDM channel wavelengths: ITU ch. 16–19, 20–23, 25–28, 29–32,
 34–37, 38–41, 43–46, 47–50, 52–55, or 56–59; 100GHz spacing
 Passband width: ITU ± 0.11nm

FORM FACTOR AND CONNECTOR TYPES

Single-wide LGX
 LC/UPC connector (all ports)

DIMENSIONS (LXWXH)

Body: 100 x 100 x 28.5 mm
 Faceplate: 130 x 28.5mm

TEMPERATURE RANGE

-40° C to 85° C

WARRANTY

All feature a limited 5-year warranty

COMPLIANCES

RoHS compliant
 Telcordia GR-1209, GR-1221

Parameter	Value
DWDM Channel Insertion Loss (dB) ¹	≤ 2.7
Express Port Insertion Loss (dB) ¹	≤ 2.3
MON Port Insertion Loss (mux/demux, dB)	≤ 21.7 / 19.0
Passband Ripple (dB)	≤ 0.5
Adjacent Channel Isolation between DWDM Channels (dB)	≥ 30
Non-Adjacent Channel Isolation Between DWDM Channels (dB)	≥ 40

Parameter	Value
Express Port Isolation (dB)	≥ 12
Polarization Dependent Loss (dB)	≤ 0.2
Directivity (dB)	≥ 50
Return Loss (dB)	≥ 45
Polarization Mode Dispersion (ps)	≤ 0.2
Fiber Type	SMF-28e+ 900 μm
Max Power Handling (mW)	300

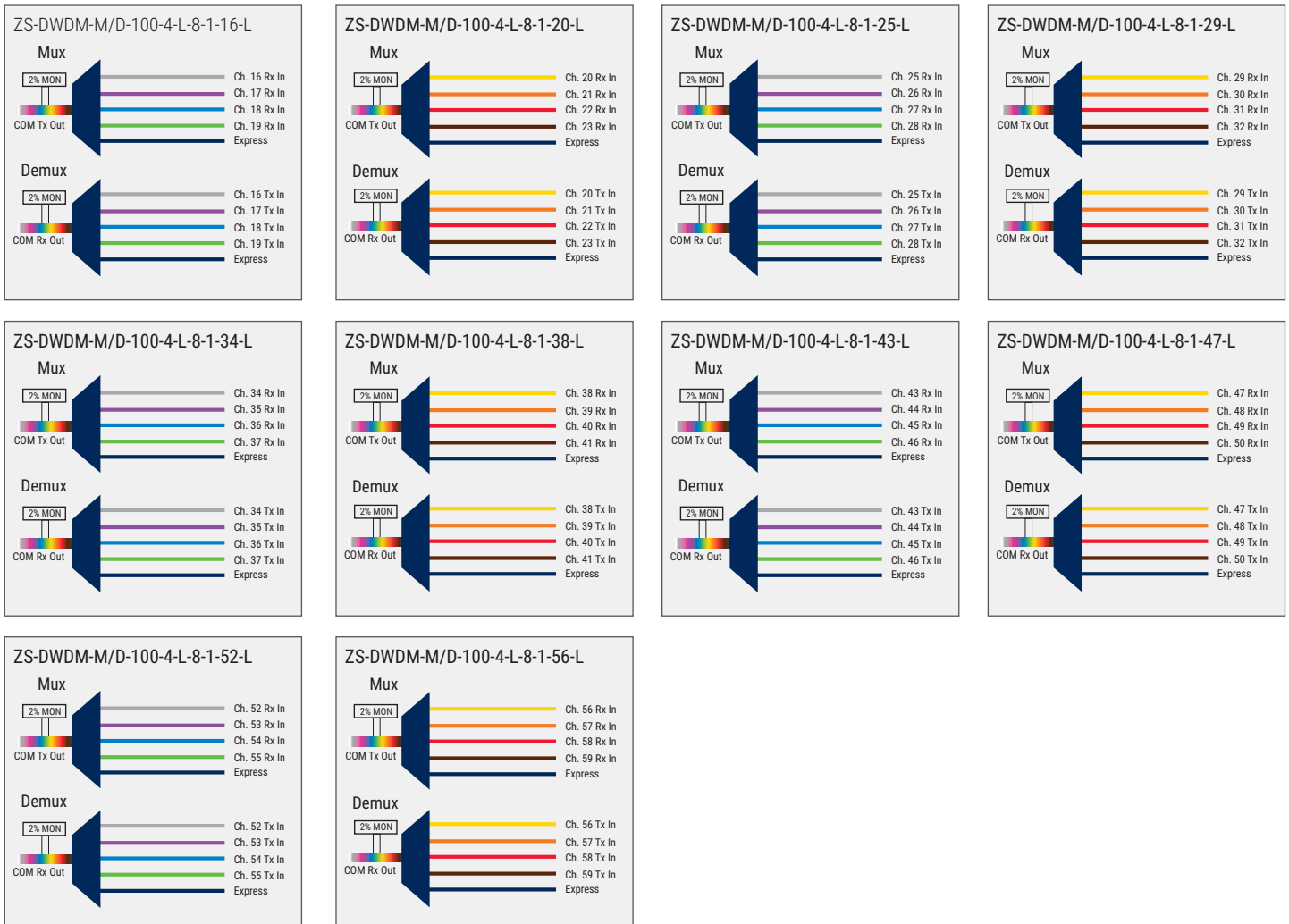
1. Refer to pages 3 through 7 for channel-specific loss values.

Ordering Information

C1 Part Number	Description
ZS-DWDM-M/D-100-4-L-8-1-16-L	4 channel DWDM Mux/Demux, Ch. 16-19, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-20-L	4 channel DWDM Mux/Demux, Ch. 20-23, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-25-L	4 channel DWDM Mux/Demux, Ch. 25-28, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-29-L	4 channel DWDM Mux/Demux, Ch. 29-32, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-34-L	4 channel DWDM Mux/Demux, Ch. 34-37, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-38-L	4 channel DWDM Mux/Demux, Ch. 38-41, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-43-L	4 channel DWDM Mux/Demux, Ch. 43-46, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-47-L	4 channel DWDM Mux/Demux, Ch. 47-50, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-52-L	4 channel DWDM Mux/Demux, Ch. 52-55, 2% MON and EXP port, LGX box, LC connector
ZS-DWDM-M/D-100-4-L-8-1-56-L	4 channel DWDM Mux/Demux, Ch. 56-59, 2% MON and EXP port, LGX box, LC connector

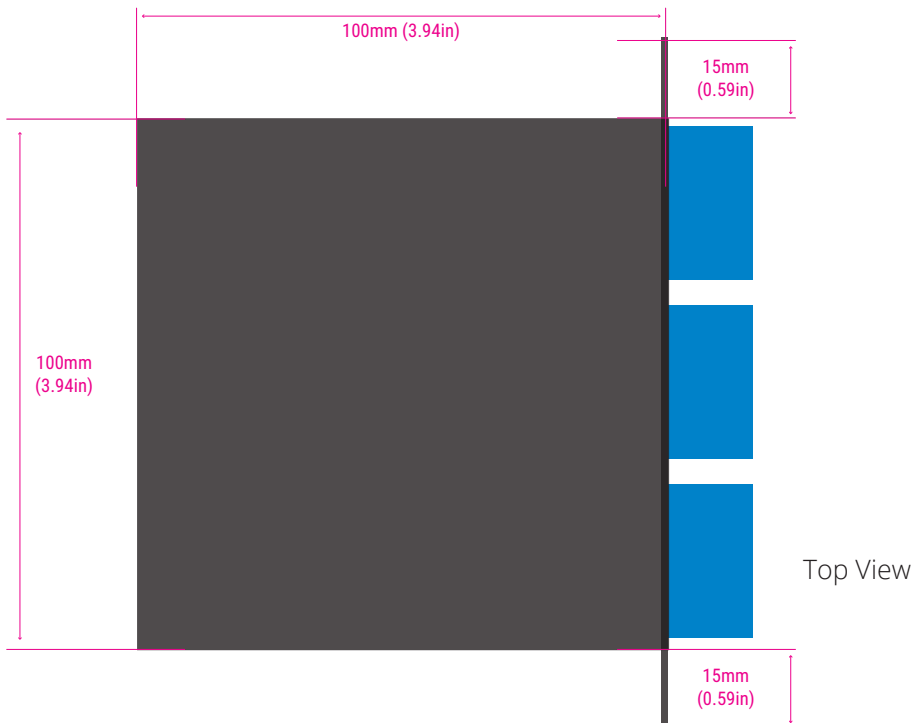
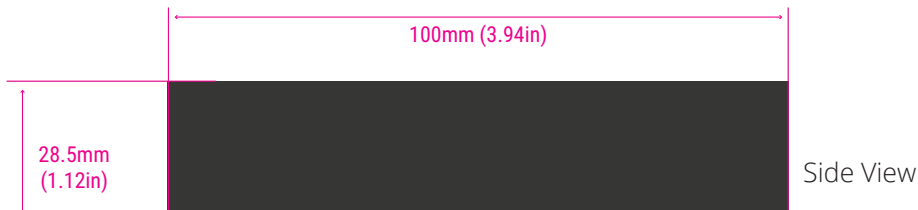
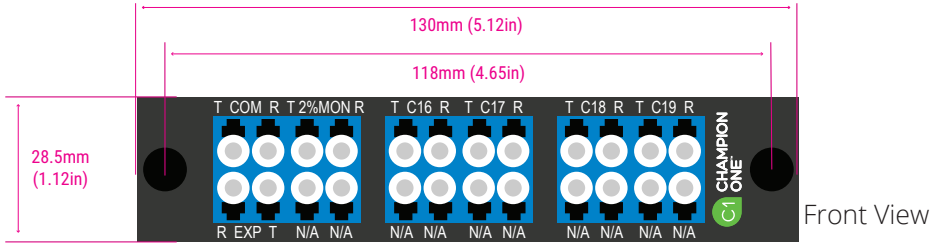
NOTE: Check transceiver channel availability before ordering. Tunables are preferred, but not required for all products.

Network Diagram



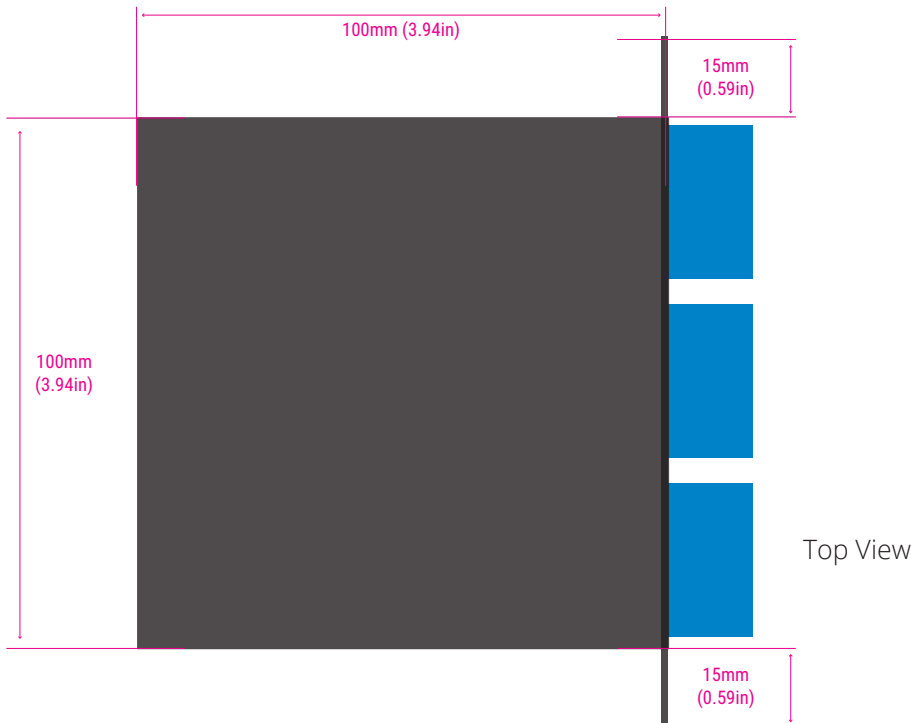
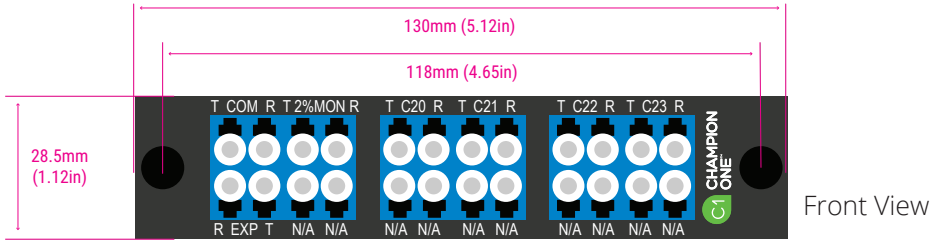
Physical Diagrams and Extended Loss Specifications

ZS-DWDM-M/D-100-4-L-8-1-16-L



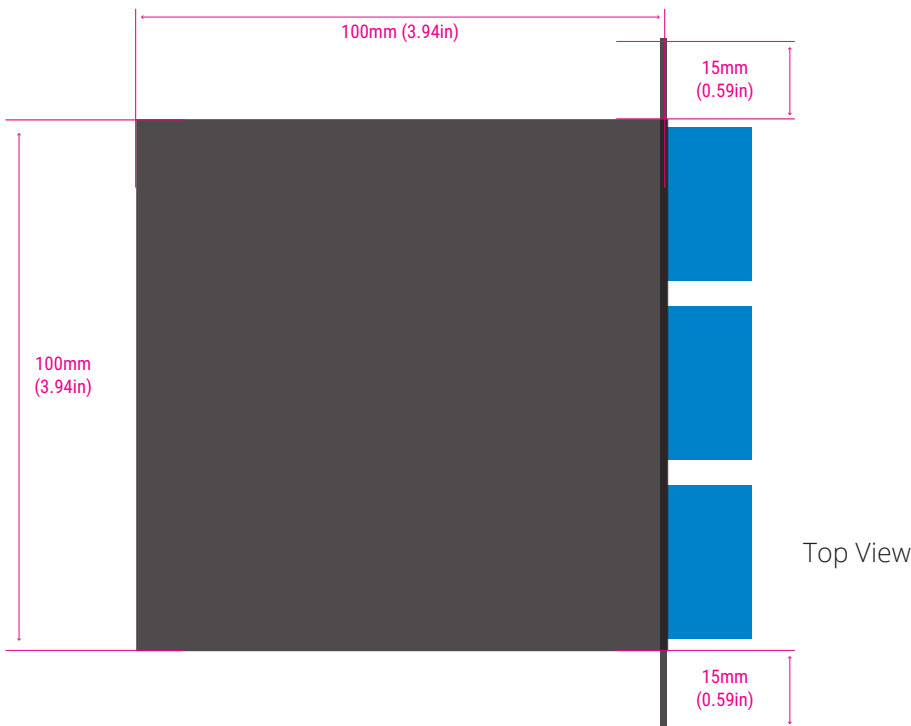
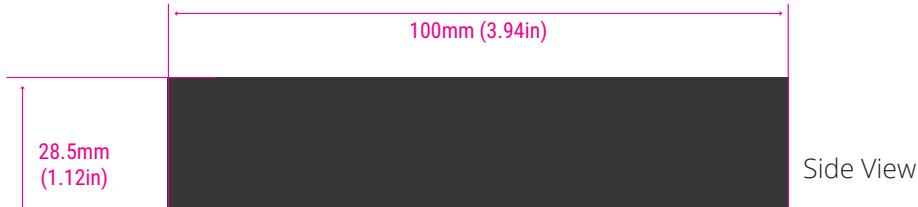
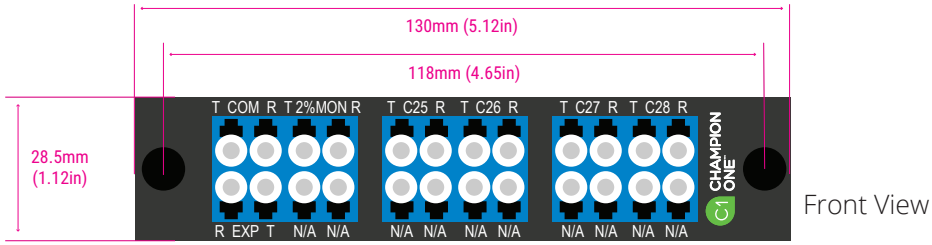
Channel	Mux IL (dB)	Dmux IL (dB)	Paired IL (dB)
ITU ch. 16	≤ 1.5	≤ 2.7	4.2
ITU ch. 17	≤ 1.9	≤ 2.3	4.2
ITU ch. 18	≤ 2.3	≤ 1.9	4.2
ITU ch. 19	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-20-L



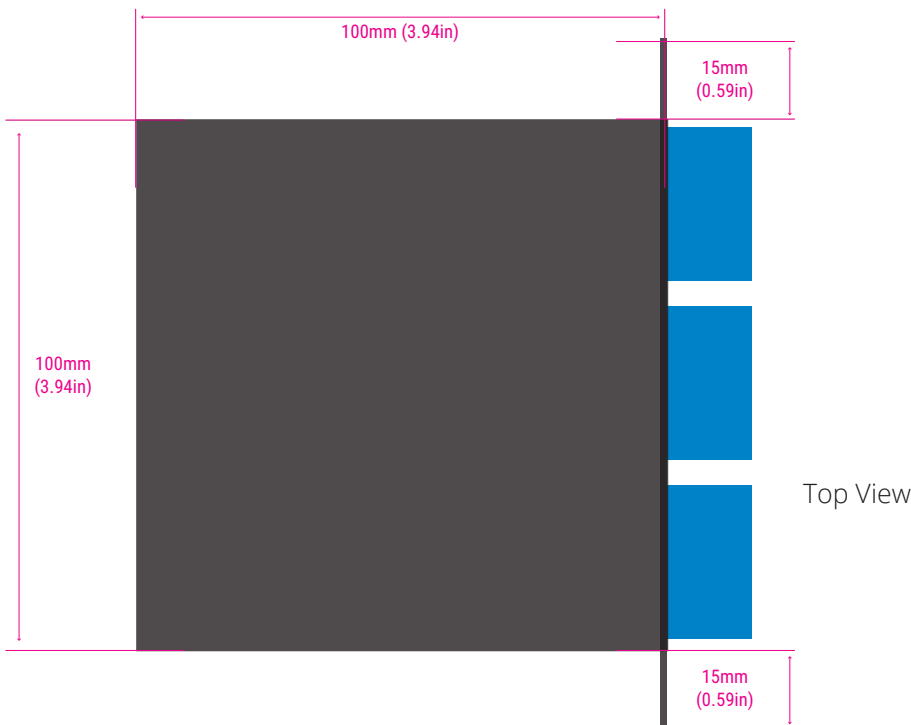
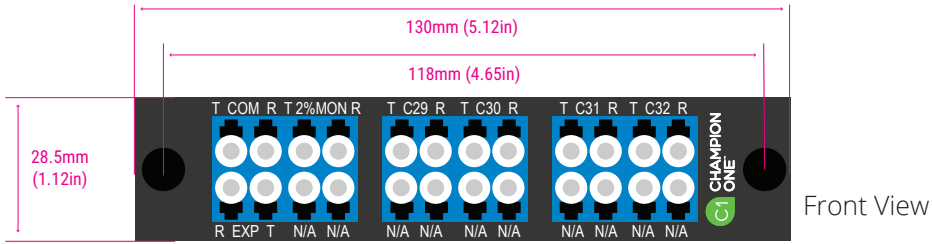
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 20	≤ 1.5	≤ 2.7	4.2
ITU ch. 21	≤ 1.9	≤ 2.3	4.2
ITU ch. 22	≤ 2.3	≤ 1.9	4.2
ITU ch. 23	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-25-L



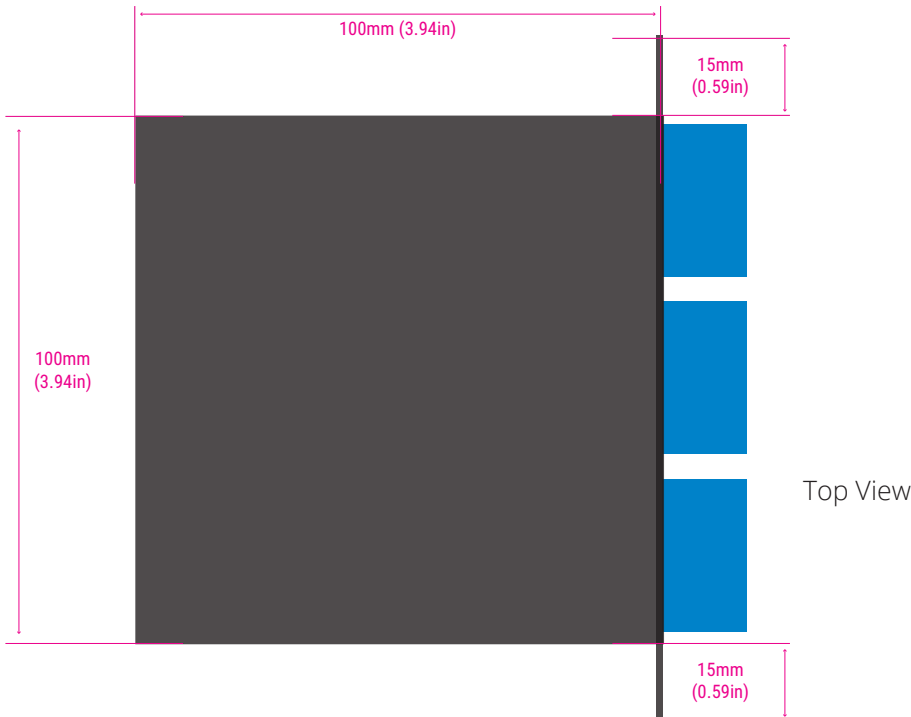
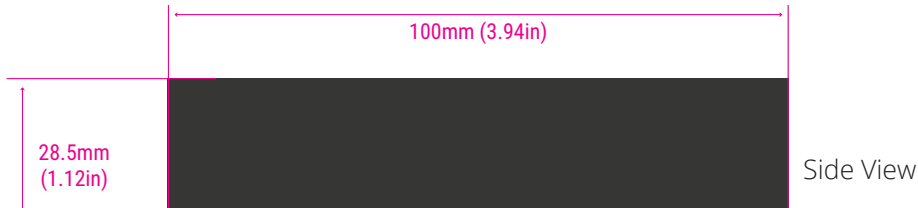
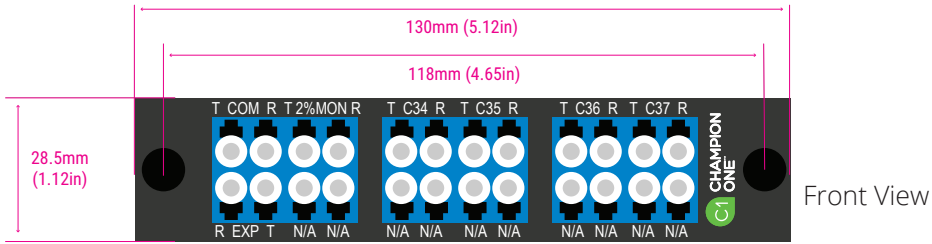
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 25	≤ 1.5	≤ 2.7	4.2
ITU ch. 26	≤ 1.9	≤ 2.3	4.2
ITU ch. 27	≤ 2.3	≤ 1.9	4.2
ITU ch. 28	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-29-L



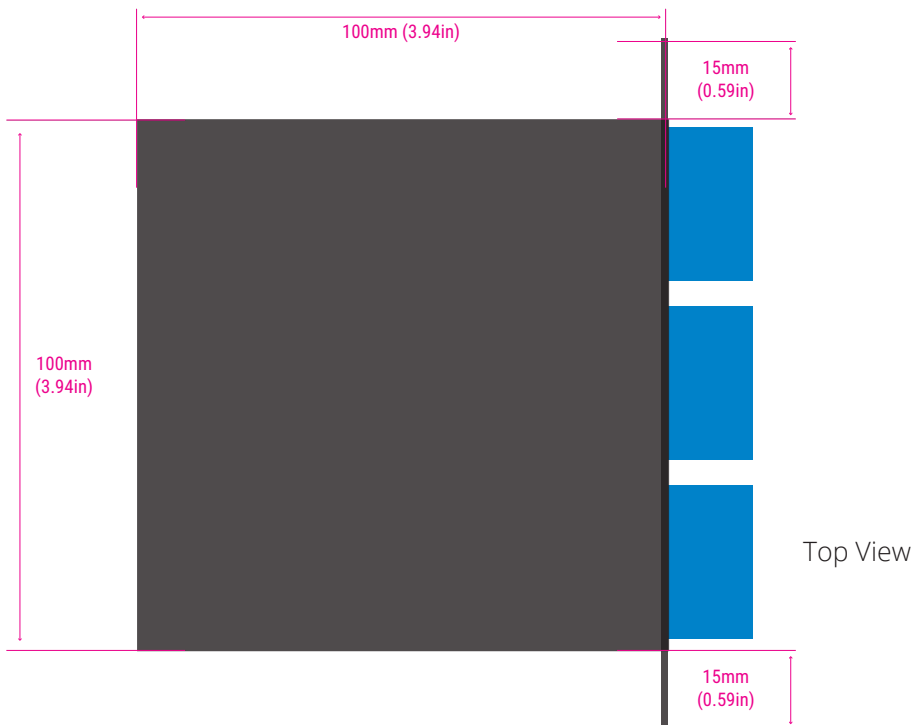
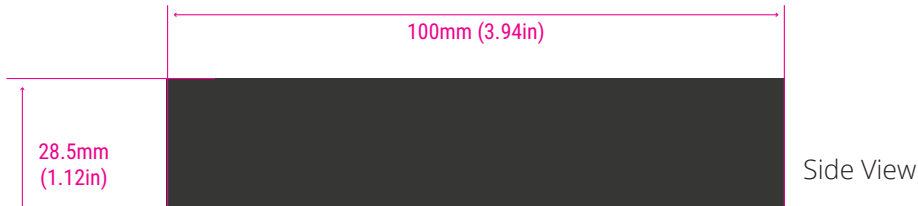
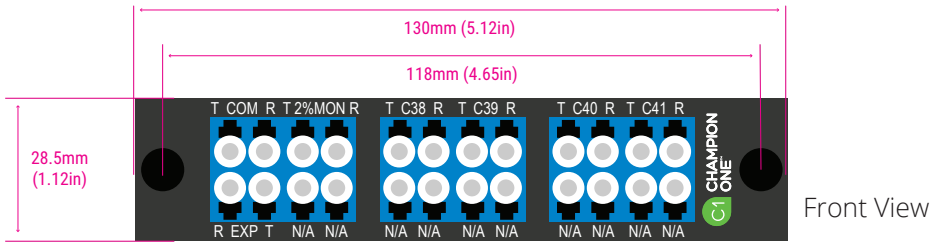
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 29	≤ 1.5	≤ 2.7	4.2
ITU ch. 30	≤ 1.9	≤ 2.3	4.2
ITU ch. 31	≤ 2.3	≤ 1.9	4.2
ITU ch. 32	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-34-L



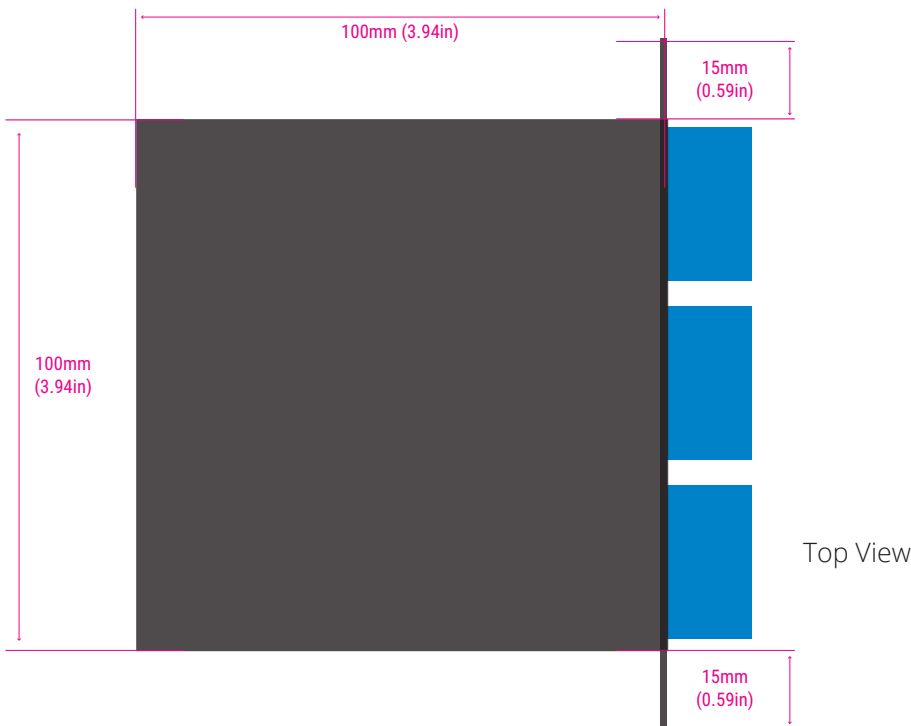
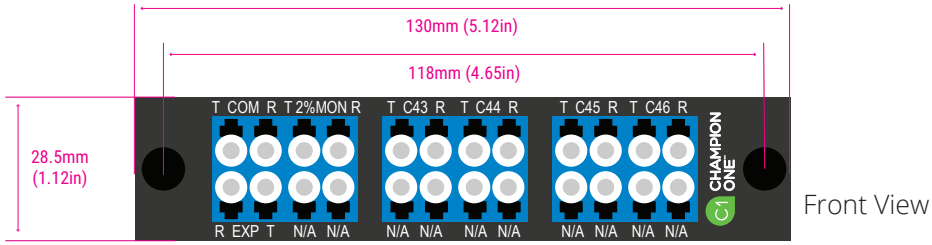
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 34	≤ 1.5	≤ 2.7	4.2
ITU ch. 35	≤ 1.9	≤ 2.3	4.2
ITU ch. 36	≤ 2.3	≤ 1.9	4.2
ITU ch. 37	≤ 2.7	≤ 1..5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-38-L



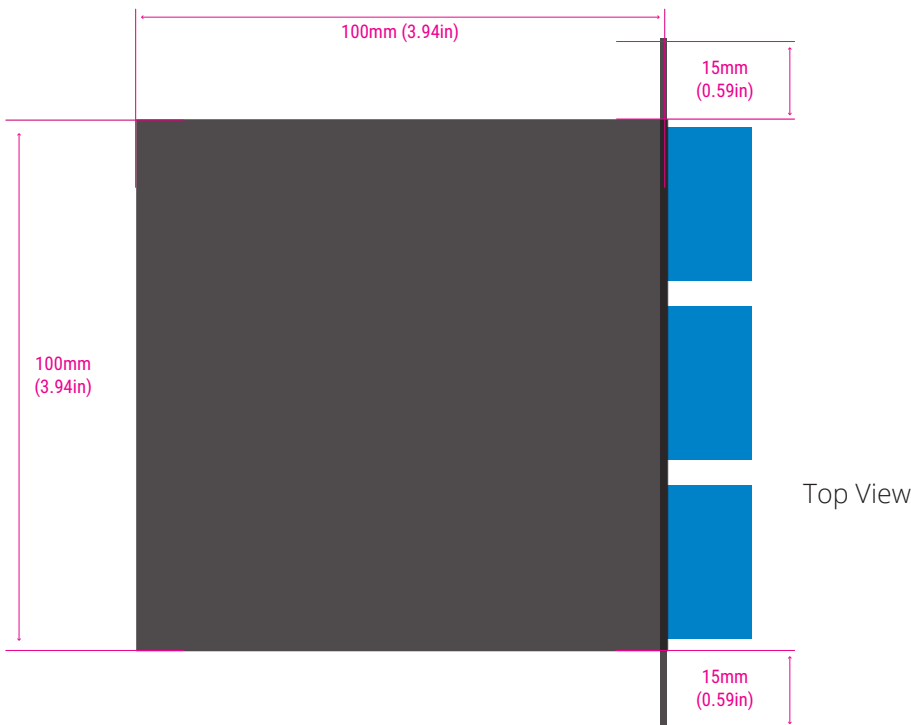
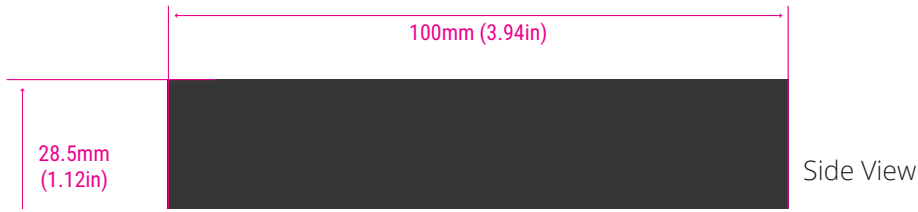
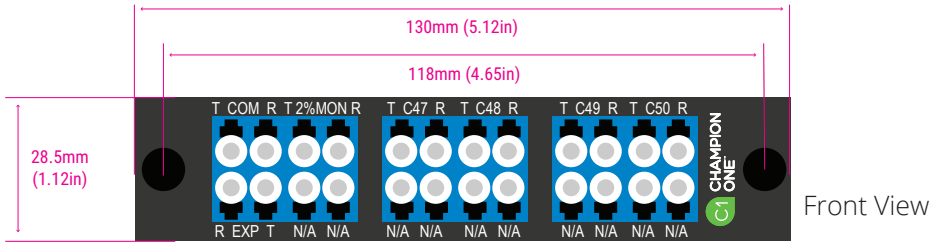
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 38	≤ 1.5	≤ 2.7	4.2
ITU ch. 39	≤ 1.9	≤ 2.3	4.2
ITU ch. 40	≤ 2.3	≤ 1.9	4.2
ITU ch. 41	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-43-L



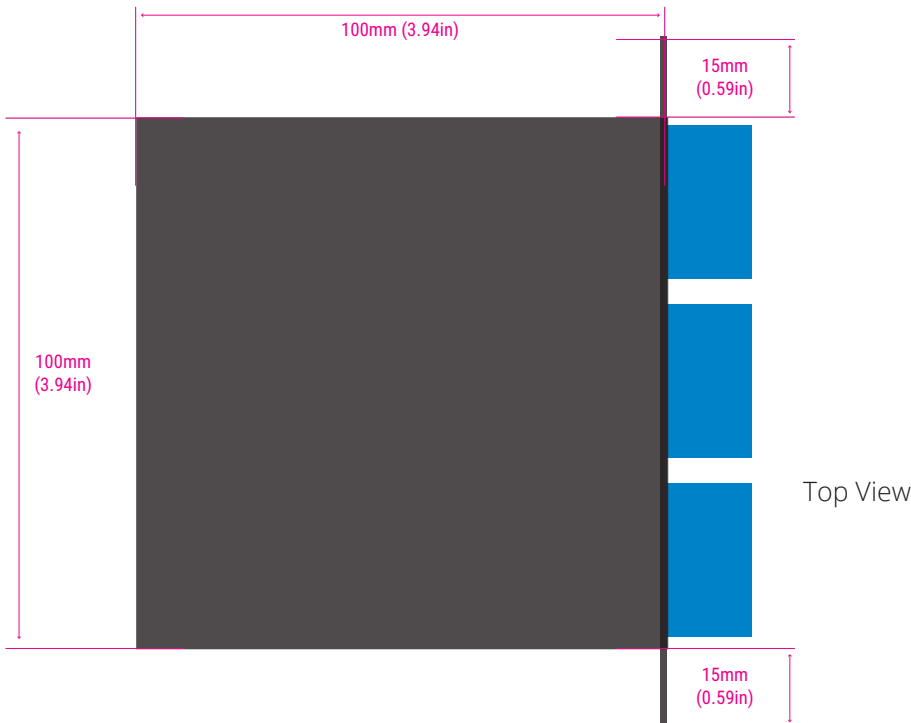
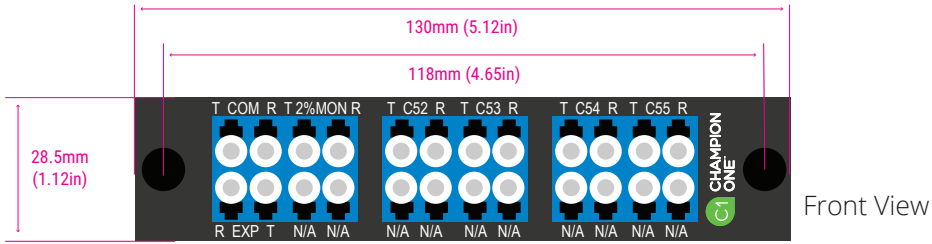
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 43	≤ 1.5	≤ 2.7	4.2
ITU ch. 44	≤ 1.9	≤ 2.3	4.2
ITU ch. 45	≤ 2.3	≤ 1.9	4.2
ITU ch. 46	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-47-L



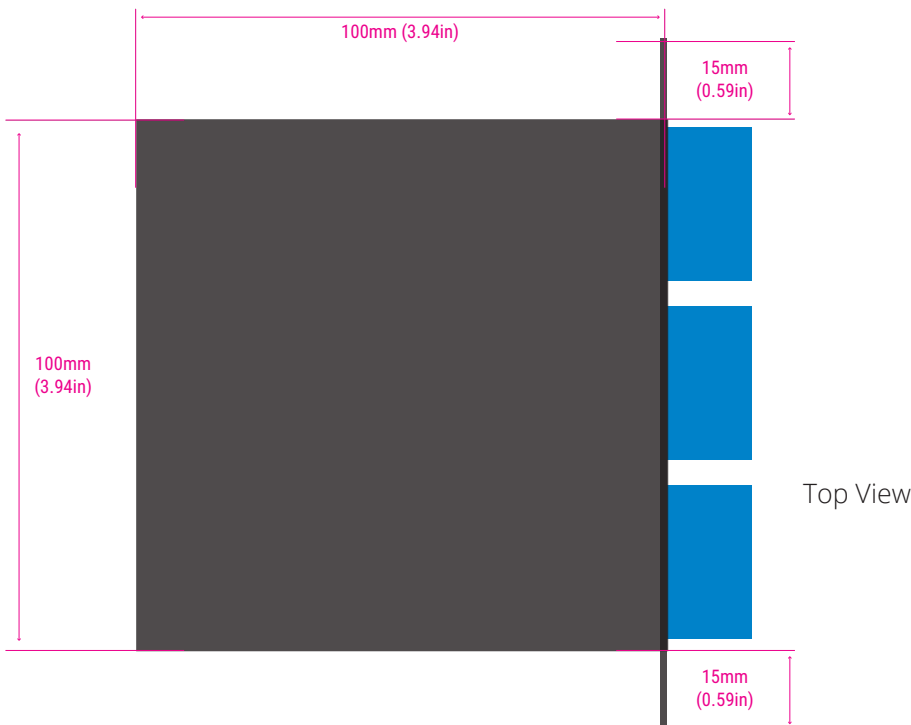
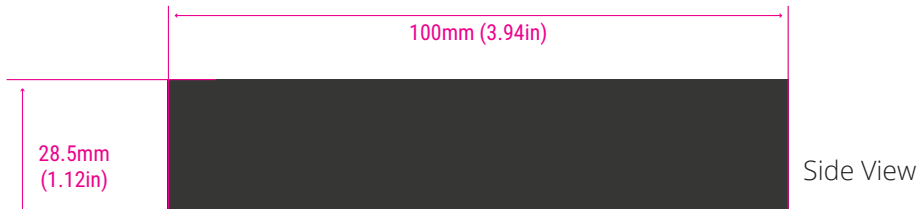
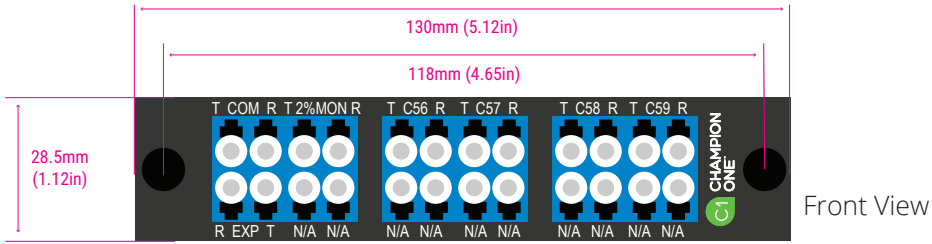
Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 47	≤ 1.5	≤ 2.7	4.2
ITU ch. 48	≤ 1.9	≤ 2.3	4.2
ITU ch. 49	≤ 2.3	≤ 1.9	4.2
ITU ch. 50	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-52-L



Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 52	≤ 1.5	≤ 2.7	4.2
ITU ch. 53	≤ 1.9	≤ 2.3	4.2
ITU ch. 54	≤ 2.3	≤ 1.9	4.2
ITU ch. 55	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6

ZS-DWDM-M/D-100-4-L-8-1-56-L



Channel	Mux IL (dB)	Dmx IL (dB)	Paired IL (dB)
ITU ch. 56	≤ 1.5	≤ 2.7	4.2
ITU ch. 57	≤ 1.9	≤ 2.3	4.2
ITU ch. 58	≤ 2.3	≤ 1.9	4.2
ITU ch. 59	≤ 2.7	≤ 1.5	4.2
EXP	≤ 2.3	≤ 2.3	4.6