

PASSIVES DATA SHEET

8 Channel OSP Dual Fiber DWDM Mux/Demux + 1310 Channel



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

Our OSP passives come in standard and IP68-compliant submersible cassettes made of aluminum alloy.

Technical Specifications

WAVELENGTH INFORMATION

Express port: 1470nm – 1620nm (excl. channel ports)
 DWDM channel wavelengths: ITU ch. 43–50 or 52–59; 100GHz spacing
 Passband width: ITU ± 0.11nm

FORM FACTOR AND CONNECTOR TYPES

OSP Cassette (IP68-compliant submersible options available)
 LC/UPC connector (MON only)

DIMENSIONS (LXWXH)

70mm x 70mm x 8mm
 2m or 3m fiber pigtails

Parameter	Value
DWDM Channel Insertion Loss (dB)	≤ 4.4
Express Port Insertion Loss (dB)	≤ 4.3
1310nm Port Insertion Loss (dB)	≤ 1.5
MON Port Insertion Loss (mux/demux, dB)	≤ 23.4 / 19.0
Passband Ripple (dB)	≤ 0.5
Adjacent Channel Isolation between DWDM Channels (dB)	≥ 30
Non-Adjacent Channel Isolation Between DWDM Channels (dB)	≥ 40
Express Port Isolation (dB)	≥ 12

TEMPERATURE RANGE

-40° C to 85° C (storage and operating)

WARRANTY

All feature a limited 5-year warranty

COMPLIANCES

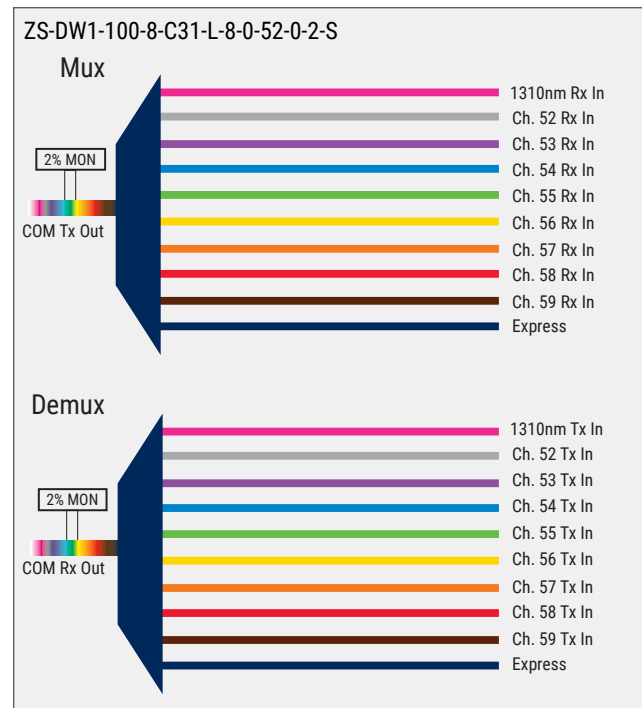
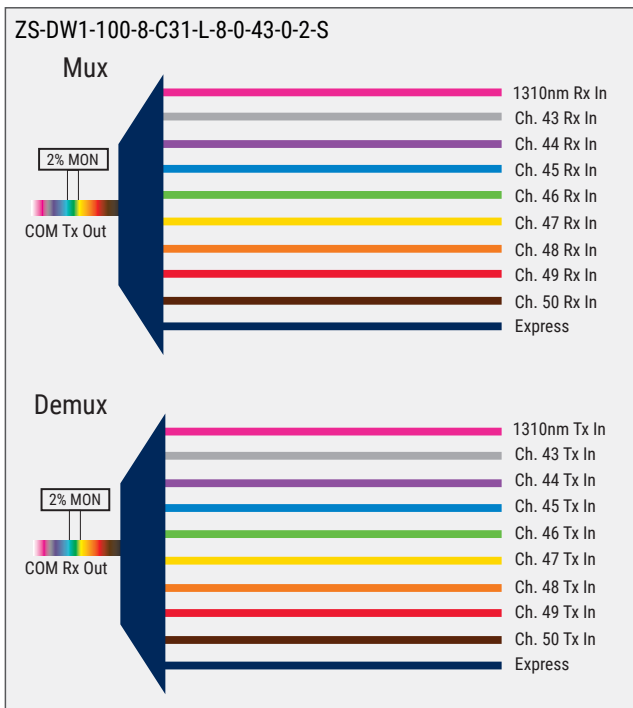
RoHS compliant
 Telcordia GR-1209, GR-1221

Parameter	Value
Polarization Dependent Loss (dB)	≤ 0.2
Directivity (dB)	≥ 50
Return Loss (dB)	≥ 45
Polarization Mode Dispersion (ps)	≤ 0.2
Fiber Type	SMF-28 or equivalent
Filter Type	TFF
Max Power Handling (mW)	300

Ordering Information

C1 Part Number	Description
ZS-DW1-100-8-C31-L-8-0-43-0-2-S	DWDM 100GHz spacing, Mux/Demux Pair (Dual Fiber), TFF Thin Film Filter Submersible, 8 Channel, No Connector, Channel 43 Start, Single module, OSP 70x70x8mm, 2m pigtail, Skip 0, Standard EXP, MON 2% M/D, 1310 wide passband
ZS-DW1-100-8-C31-L-8-0-52-0-2-S	DWDM 100GHz spacing, Mux/Demux Pair (Dual Fiber), TFF Thin Film Filter Submersible, 8 Channel, No Connector, Channel 52 Start, Single module, OSP 70x70x8mm, 2m pigtail, Skip 0, Standard EXP, MON 2% M/D, 1310 wide passband

Network Diagram

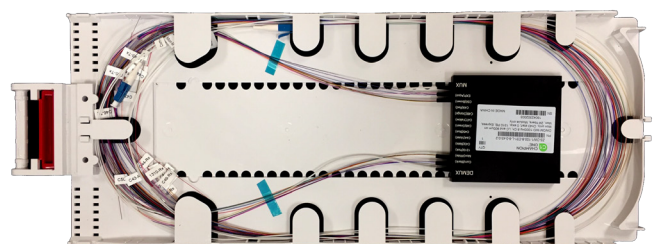


Tray Integration Options

Sample Module in Tyco "B" Tray

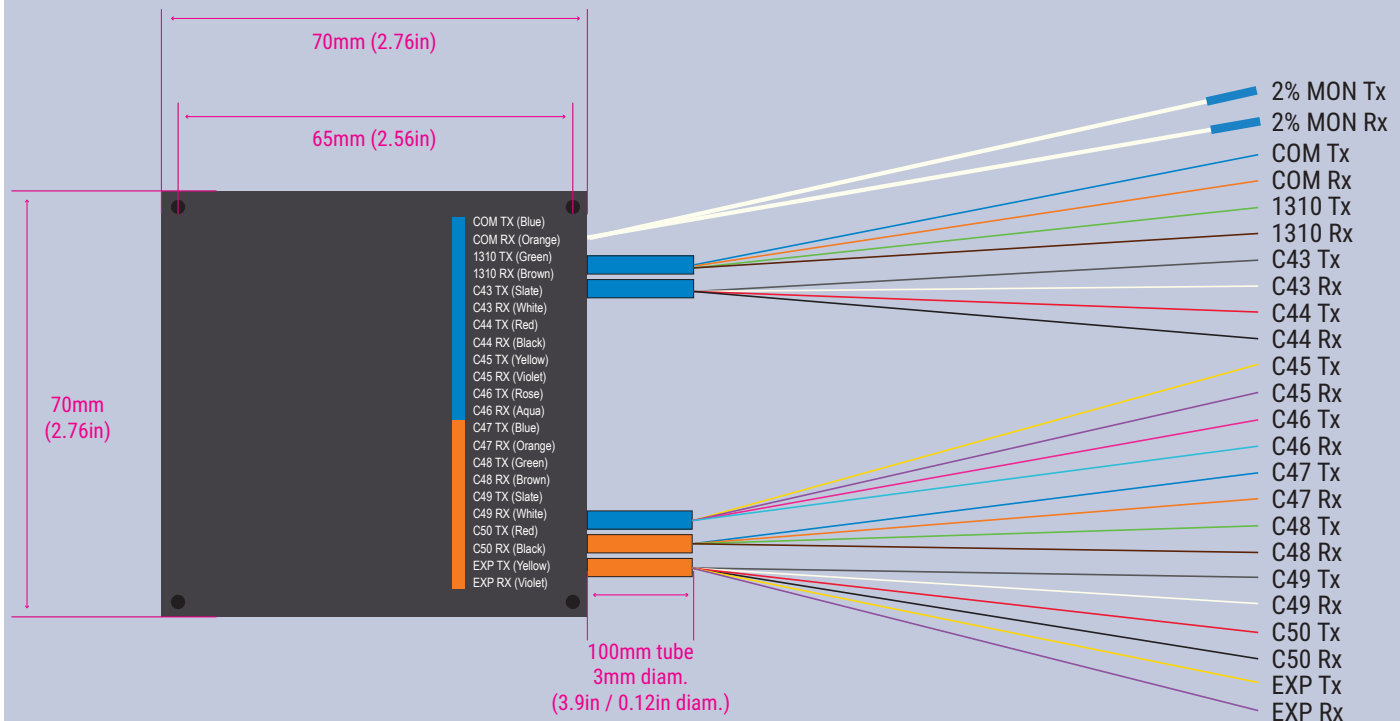


Sample Module in Tyco "D" Tray

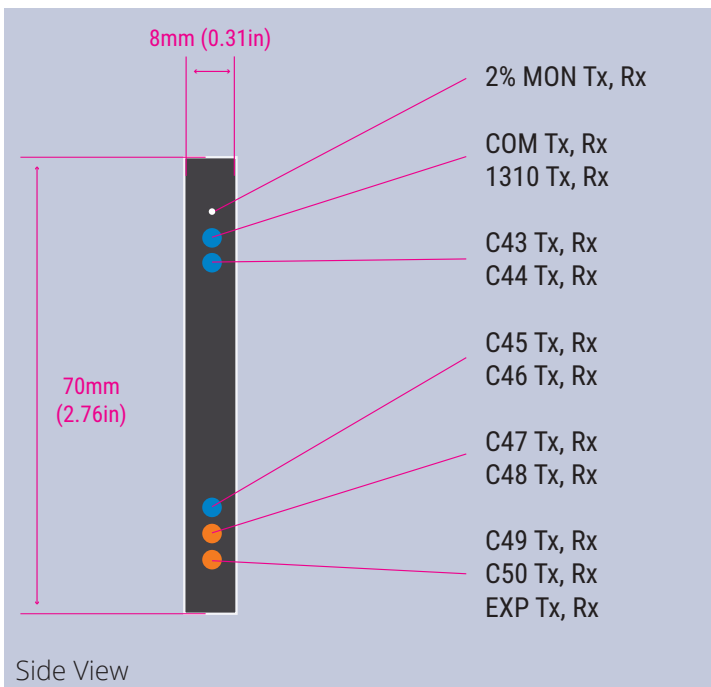


Physical Diagrams and Extended Loss Specifications

ZS-DW1-100-8-C31-L-8-0-43-0-2-S



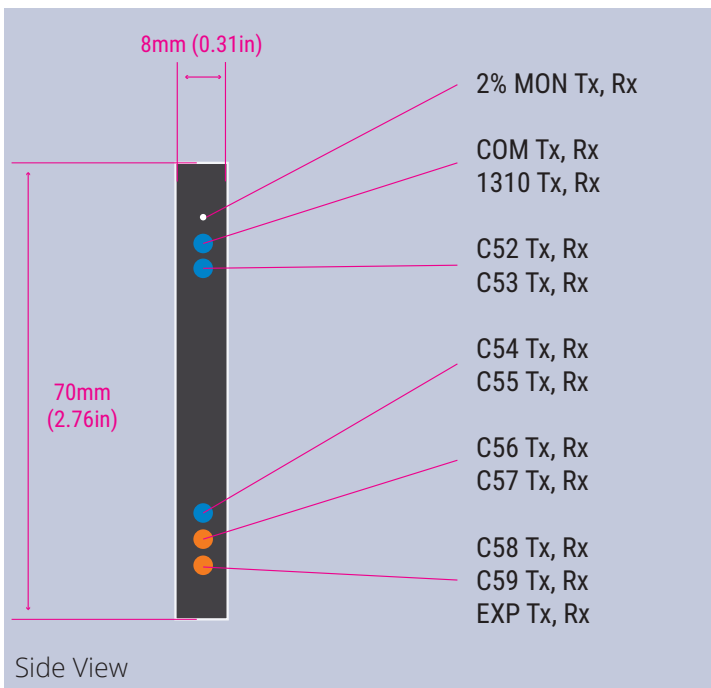
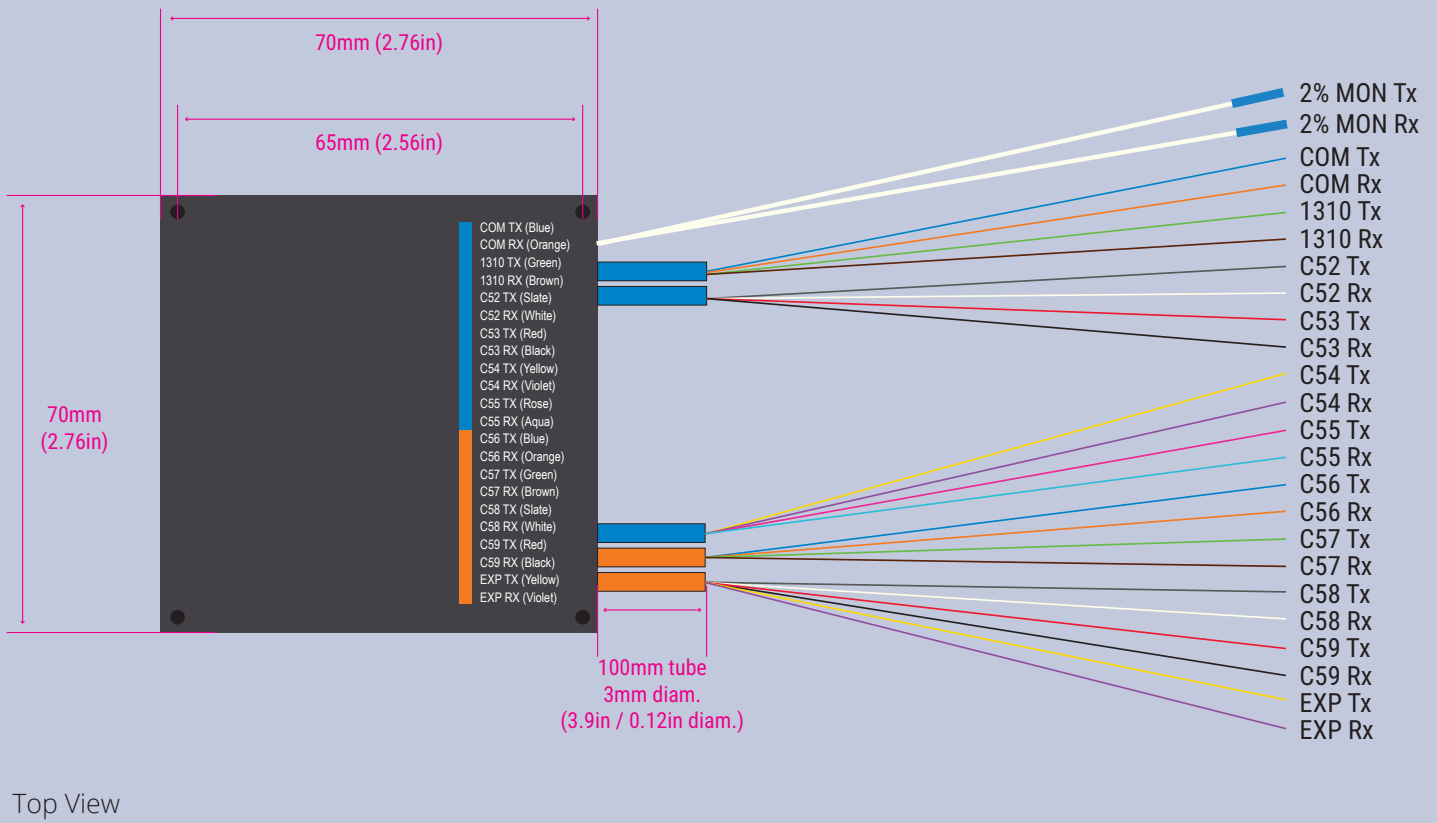
Top View



Side View

Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
1310nm	1.3		1.5	
ITU ch. 43	1.7	4.2	1.9	4.4
ITU ch. 44	2.1	3.9	2.3	4.1
ITU ch. 45	2.5	3.6	2.7	3.8
ITU ch. 46	2.9	3.3	3.1	3.5
ITU ch. 47	3.3	2.9	3.5	3.1
ITU ch. 48	3.6	2.5	3.8	2.7
ITU ch. 49	3.9	2.1	4.1	2.3
ITU ch. 50	4.2	1.7	4.4	1.9
EXP	4.0		4.3	

ZS-DW1-100-8-C31-L-8-0-52-0-2-S



Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
1310nm	1.3		1.5	
ITU ch. 52	1.7	4.2	1.9	4.4
ITU ch. 53	2.1	3.9	2.3	4.1
ITU ch. 54	2.5	3.6	2.7	3.8
ITU ch. 55	2.9	3.3	3.1	3.5
ITU ch. 56	3.3	2.9	3.5	3.1
ITU ch. 57	3.6	2.5	3.8	2.7
ITU ch. 58	3.9	2.1	4.1	2.3
ITU ch. 59	4.2	1.7	4.4	1.9
EXP	4.0		4.3	