

PASSIVES DATA SHEET

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



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 patent-pending IP68-compliant submersible cassettes made of aluminum alloy.

Technical Specifications

WAVELENGTH INFORMATION

DWDM channel wavelengths: ITU ch. 16–23, 25–32, 34–41, 43–50, 52–59, 100GHz spacing
Passband width: ITU \pm 0.11 nm

FORM FACTOR AND CONNECTOR TYPE

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

DIMENSIONS (LXWXH)

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

TEMPERATURE RANGE

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

WARRANTY

All feature a limited 5-year warranty

COMPLIANCES

RoHS compliant
Telcordia GR-1209, GR-1221

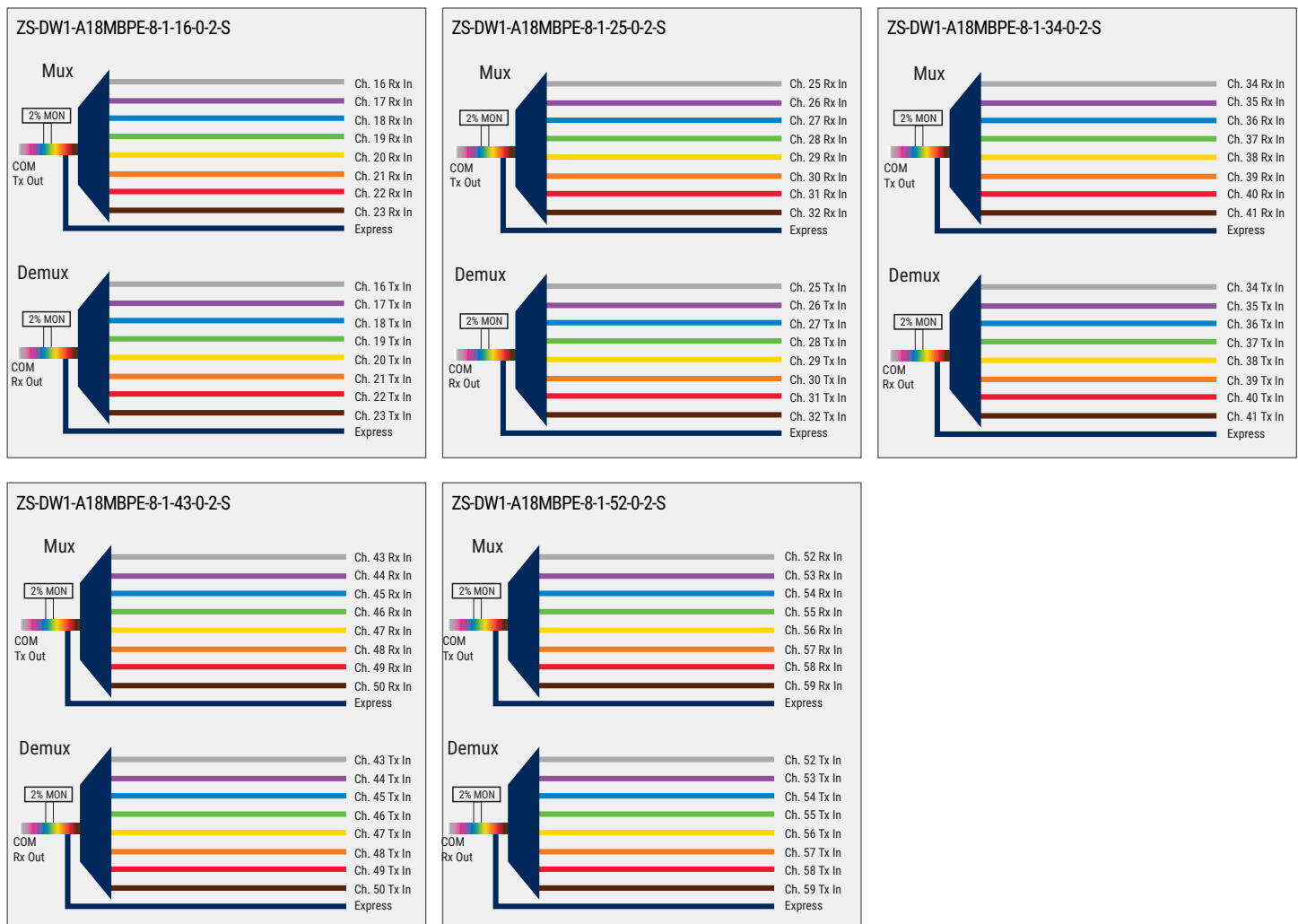
Parameter	Value
DWDM Channel Insertion Loss (dB)	\leq 3.4
Express Channel Insertion Loss (dB)	\leq 0.75
MON Port Insertion Loss (mux/demux, dB)	\leq 22.4 / 19.0
Passband Ripple (dB)	\leq 0.5
Adjacent Channel Isolation between DWDM Channels (dB)	\geq 30
Non-Adjacent Channel Isolation Between DWDM Channels (dB)	\geq 40
Express Channel Port Isolation (dB)	\geq 12

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

Ordering Information

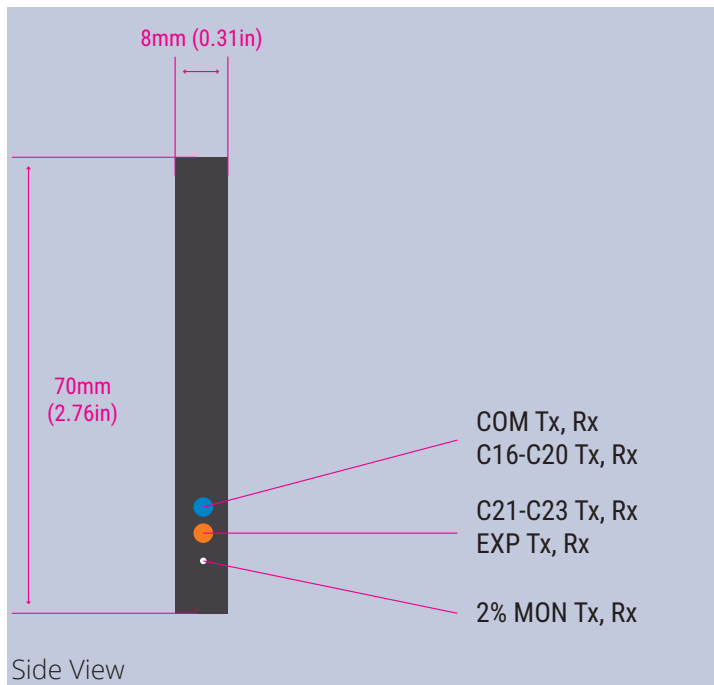
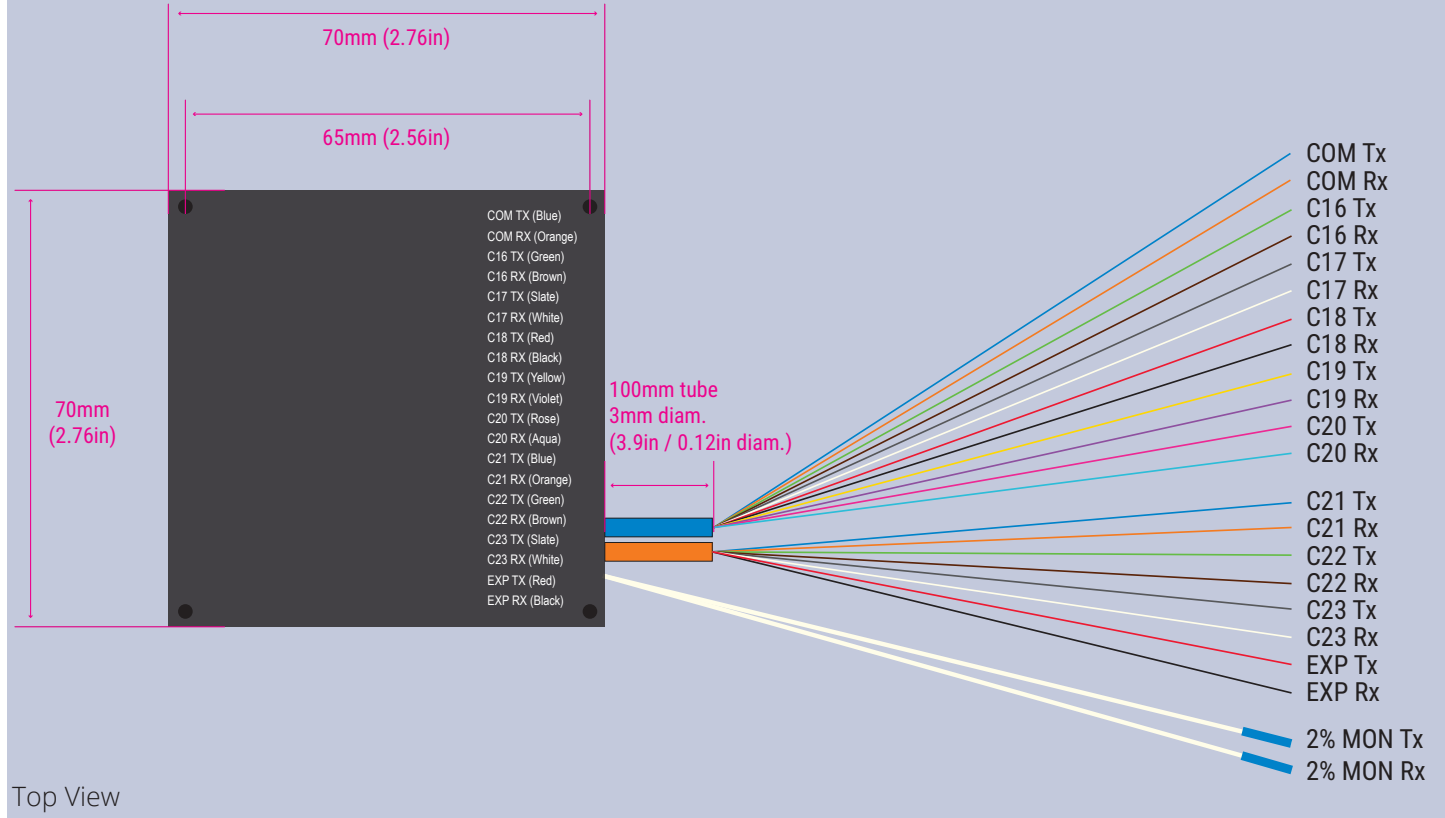
C1 Part Number	Description
SUBMERSIBLE OSP CASSETTE	
ZS-DW1-A18MBPE-8-1-16-0-2-S	DWDM M/D 100Ghz 8 Ch, TFF, Ch 16 Start, 8 Skip 1, BP Express, 2m Fibers, LC 900um 2% Mon Only, OSP 70mm x 70mm x 8mm Mod Only, Submersible
ZS-DW1-A18MBPE-8-1-25-0-2-S	DWDM M/D 100Ghz 8 Ch, TFF, Ch 25 Start, 8 Skip 1, BP Express, 2m Fibers, LC 900um 2% Mon Only, OSP 70mm x 70mm x 8mm Mod Only, Submersible
ZS-DW1-A18MBPE-8-1-34-0-2-S	DWDM M/D 100Ghz 8 Ch, TFF, Ch 34 Start, 8 Skip 1, BP Express, 2m Fibers, LC 900um 2% Mon Only, OSP 70mm x 70mm x 8mm Mod Only, Submersible
ZS-DW1-A18MBPE-8-1-43-0-2-S	DWDM M/D 100Ghz 8 Ch, TFF, Ch 43 Start, 8 Skip 1, BP Express, 2m Fibers, LC 900um 2% Mon Only, OSP 70mm x 70mm x 8mm Mod Only, Submersible
ZS-DW1-A18MBPE-8-1-52-0-2-S	DWDM M/D 100Ghz 8 Ch, TFF, Ch 52 Start, 8 Skip 1, BP Express, 2m Fibers, LC 900um 2% Mon Only, OSP 70mm x 70mm x 8mm Mod Only, Submersible

Network Diagrams



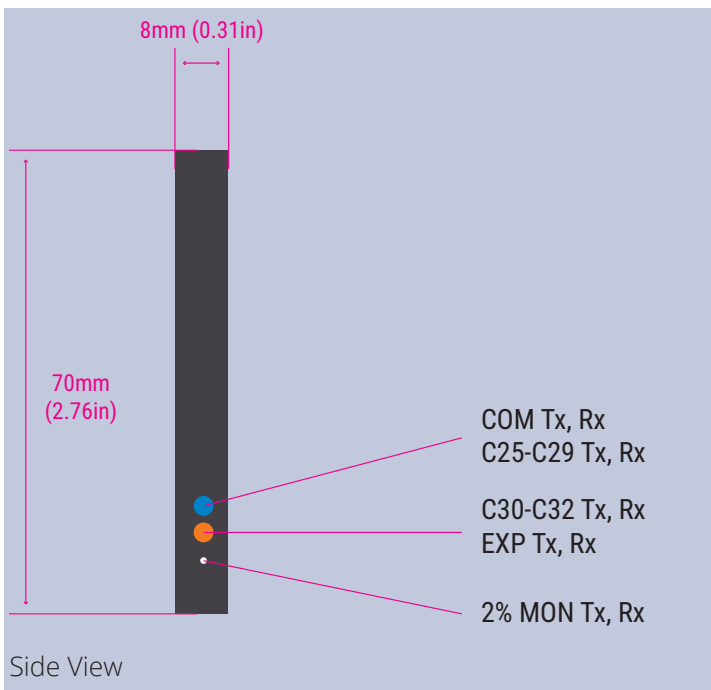
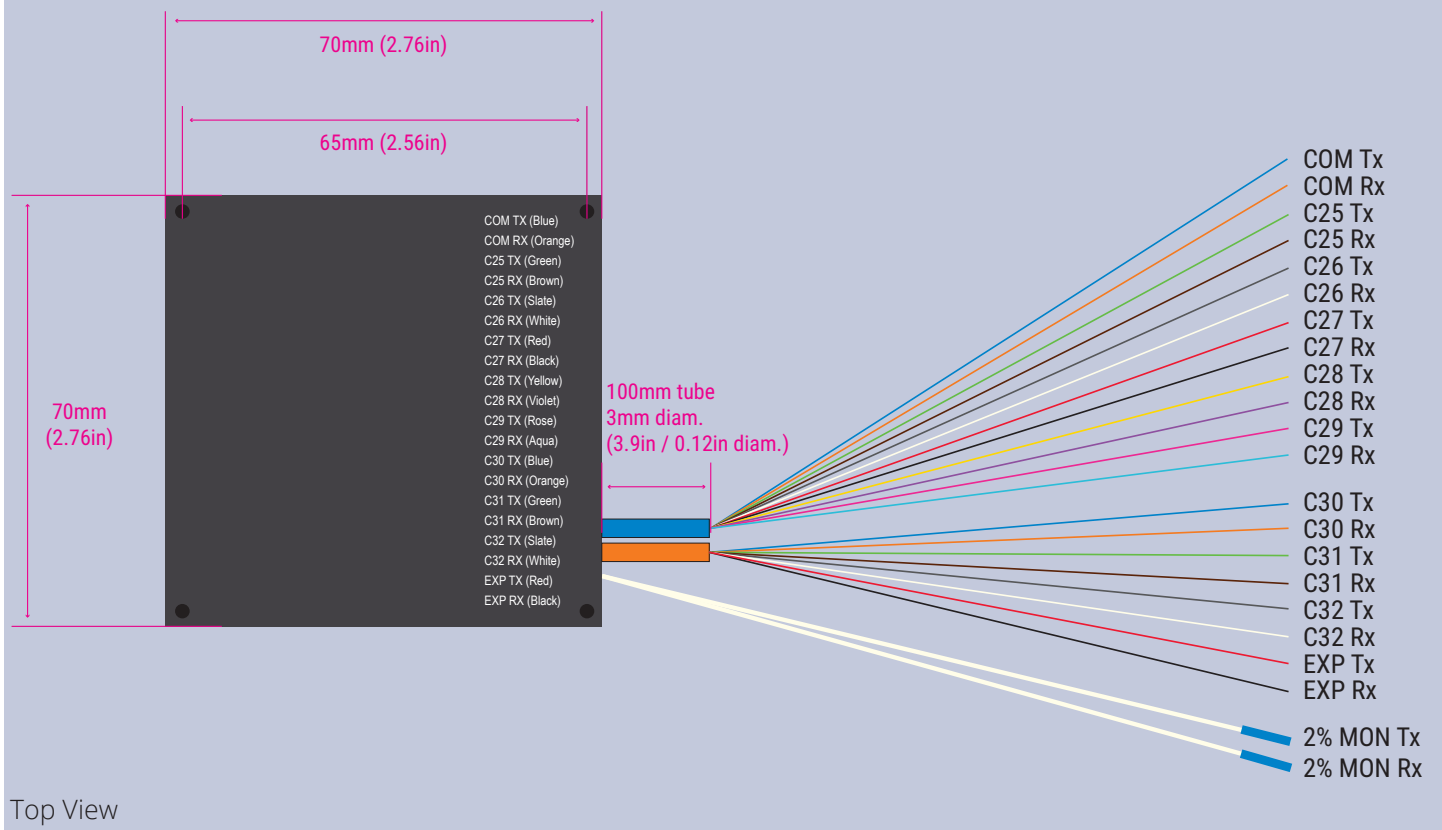
Physical Diagrams and Extended Loss Specifications

ZS-DW1-A18MBPE-8-1-16-0-2-S



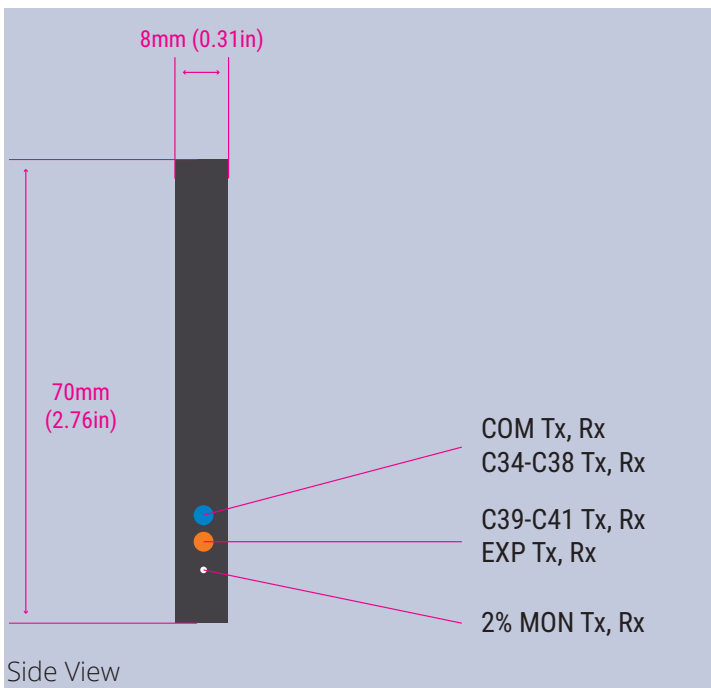
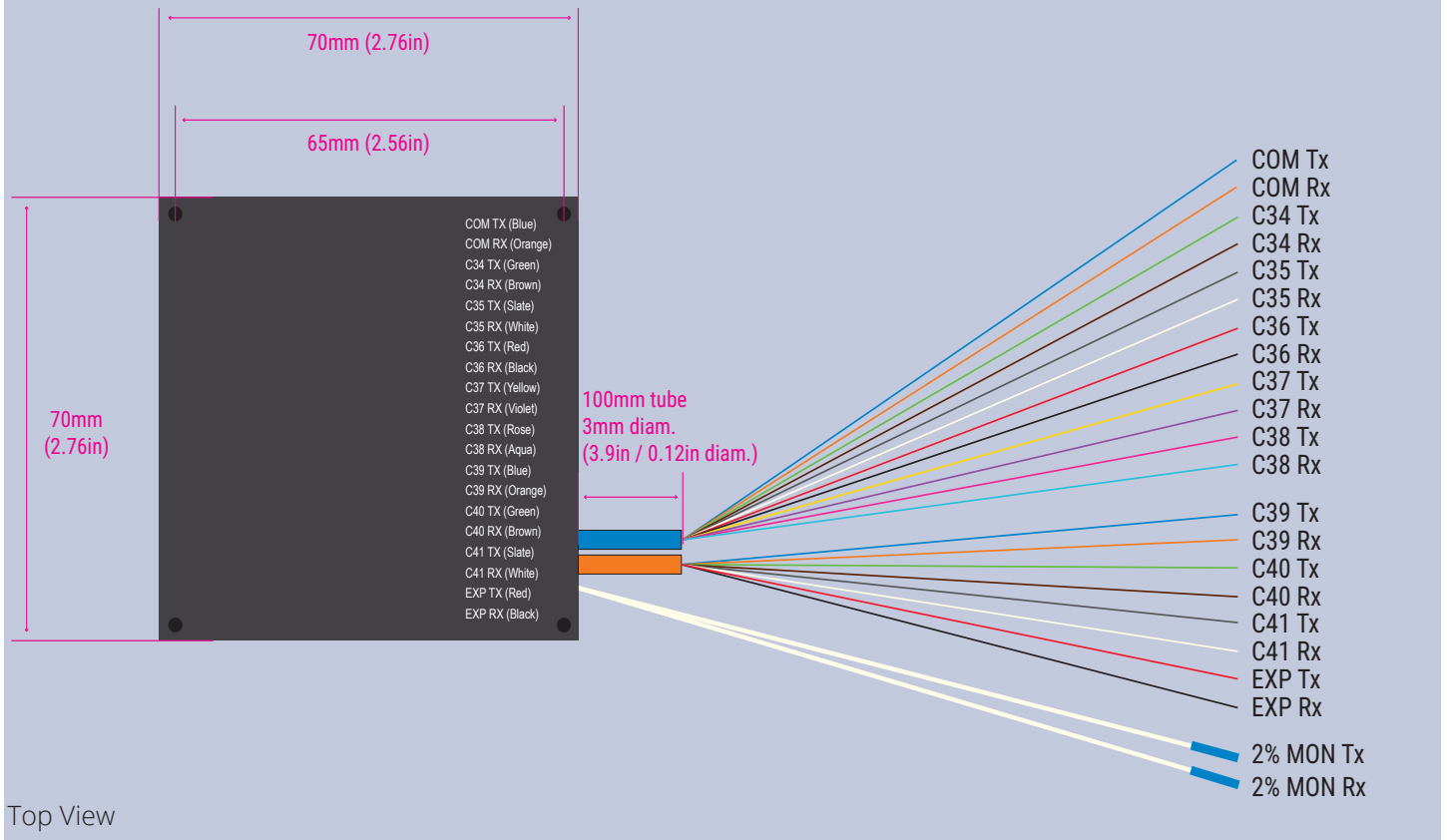
Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
ITU ch. 16	1.6	3.2	1.8	3.4
ITU ch. 17	1.9	3.0	2.1	3.2
ITU ch. 18	2.2	2.8	2.4	3.0
ITU ch. 19	2.4	2.6	2.6	2.8
ITU ch. 20	2.6	2.4	2.8	2.6
ITU ch. 21	2.8	2.2	3.0	2.4
ITU ch. 22	3.0	1.9	3.2	2.1
ITU ch. 23	3.2	1.6	3.4	1.8
EXP	0.65		0.75	

ZS-DW1-A18MBPE-8-1-25-0-2-S



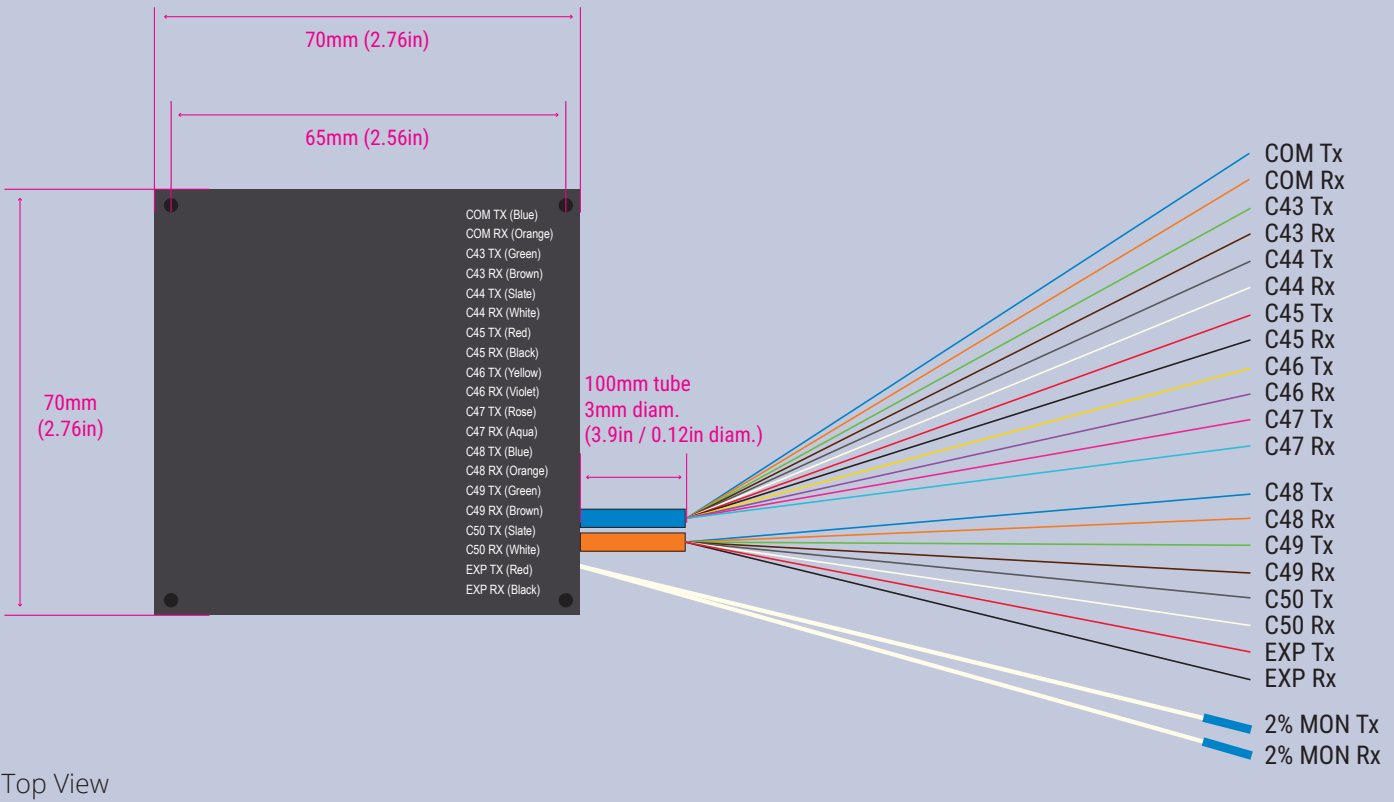
Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
ITU ch. 25	1.8	3.4	2.0	3.6
ITU ch. 26	2.1	3.2	2.3	3.4
ITU ch. 27	2.4	3.0	2.6	3.2
ITU ch. 28	2.6	2.8	2.8	3.0
ITU ch. 29	2.8	2.6	3.0	2.8
ITU ch. 30	3.0	2.4	3.2	2.6
ITU ch. 31	3.2	2.1	3.4	2.3
ITU ch. 32	3.4	1.8	3.6	2.0
EXP	0.65		0.75	

ZS-DW1-A18MBPE-8-1-34-0-2-S

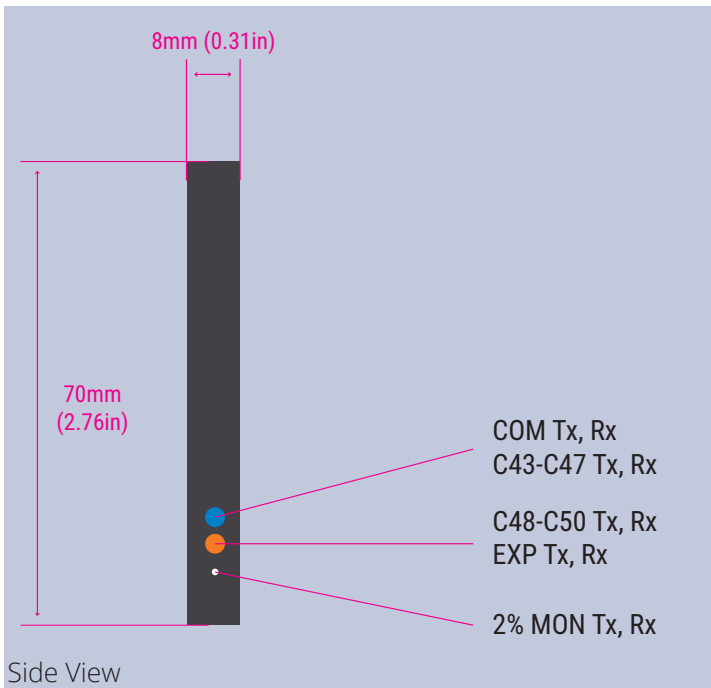


Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
ITU ch. 34	1.8	3.4	2.0	3.6
ITU ch. 35	2.1	3.2	2.3	3.4
ITU ch. 36	2.4	3.0	2.6	3.2
ITU ch. 37	2.6	2.8	2.8	3.0
ITU ch. 38	2.8	2.6	3.0	2.8
ITU ch. 39	3.0	2.4	3.2	2.6
ITU ch. 40	3.2	2.1	3.4	2.3
ITU ch. 41	3.4	1.8	3.6	2.0
EXP	0.65		0.75	

ZS-DW1-A18MBPE-8-1-43-0-2-S



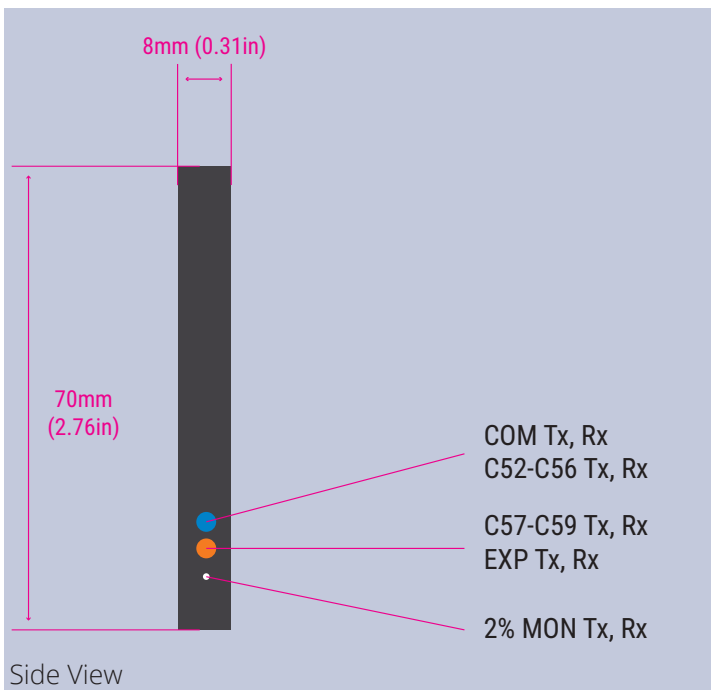
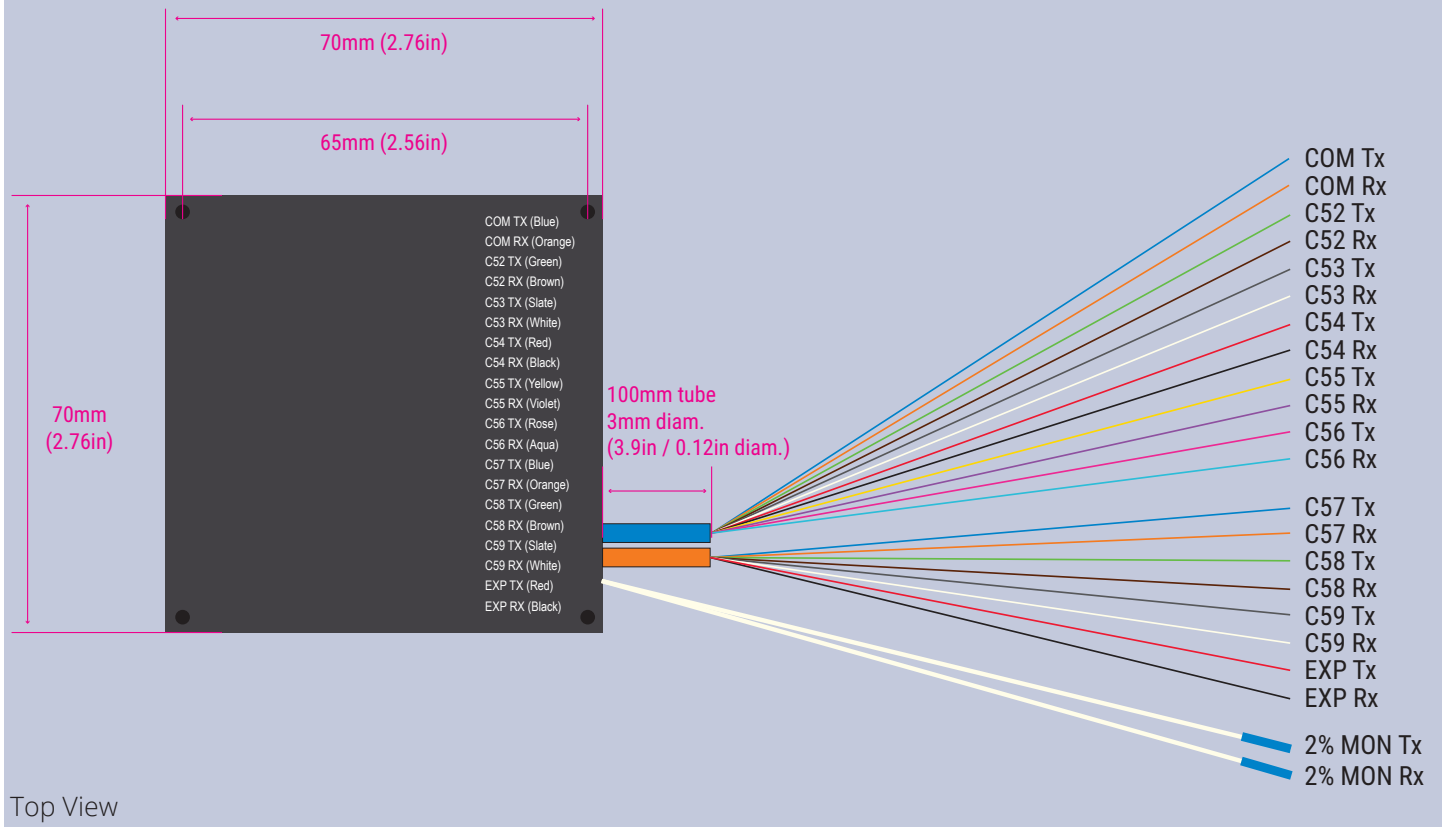
Top View



Side View

Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
ITU ch. 43	1.8	3.4	2.0	3.6
ITU ch. 44	2.1	3.2	2.3	3.4
ITU ch. 45	2.4	3.0	2.6	3.2
ITU ch. 46	2.6	2.8	2.8	3.0
ITU ch. 47	2.8	2.6	3.0	2.8
ITU ch. 48	3.0	2.4	3.2	2.6
ITU ch. 49	3.2	2.1	3.4	2.3
ITU ch. 50	3.4	1.8	3.6	2.0
EXP	0.65		0.75	

ZS-DW1-A18MBPE-8-1-52-0-2-S



Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
ITU ch. 52	1.8	3.4	2.0	3.6
ITU ch. 53	2.1	3.2	2.3	3.4
ITU ch. 54	2.4	3.0	2.6	3.2
ITU ch. 55	2.6	2.8	2.8	3.0
ITU ch. 56	2.8	2.6	3.0	2.8
ITU ch. 57	3.0	2.4	3.2	2.6
ITU ch. 58	3.2	2.1	3.4	2.3
ITU ch. 59	3.4	1.8	3.6	2.0
EXP	0.65		0.75	