

PASSIVES DATA SHEET

OSP 8 Channel Dual Fiber CWDM Mux/Demux with 1310nm Channel



Champion ONE's CWDM 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

Operating wavelengths: 1260nm – 1620nm
 Center wavelengths: 1310nm, 1471nm – 1611nm
 CWDM channel spacing: 20 nm
 Passband width: ITU ± 6.5nm

FORM FACTOR AND CONNECTOR TYPES

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

DIMENSIONS (LXWXH)

Body: 70 x 70 x 8 mm

TEMPERATURE RANGE

-40° C to 85° C

WARRANTY

All feature a limited 5-year warranty

COMPLIANCES

RoHS compliant
 Telcordia GR-1209, GR-1221

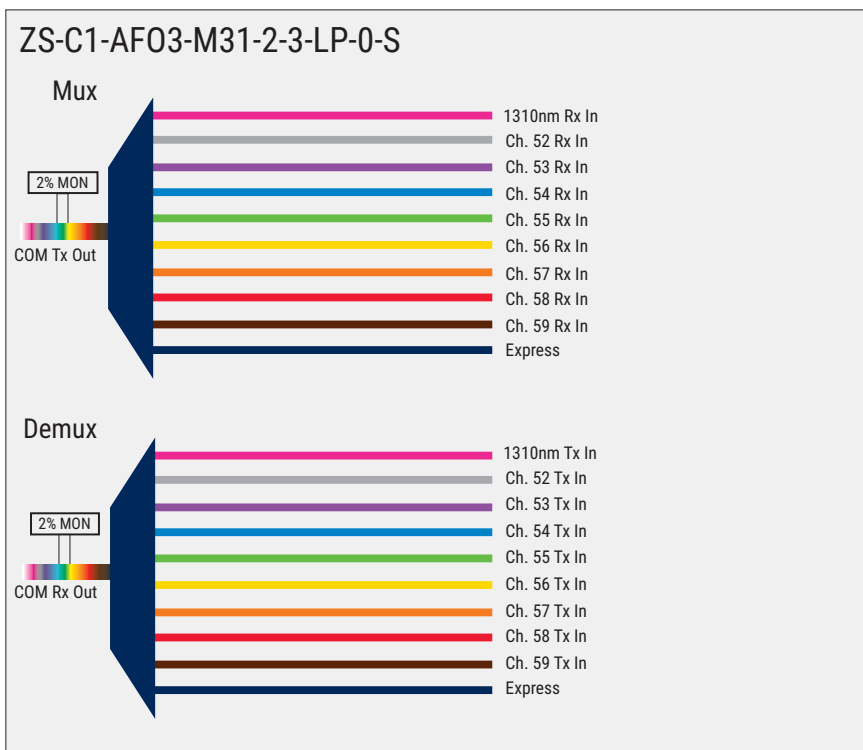
Parameter	Value
1310 Channel Insertion Loss (dB)	≤ 1.5
CWDM Channel Insertion Loss (dB)	≤ 3.0
MON Port Insertion Loss (mux/demux, dB)	≤ 22.0 / 19.0
Passband Ripple (dB)	≤ 0.5
Adjacent Channel Isolation Between CWDM Channels (dB)	≥ 30
Non-Adjacent Channel Isolation Between CWDM Channels (dB)	≥ 40
1310nm Channel Isolation (dB)	≥ 30

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 900µm (MON); color-coded 9 / 125 / 250 µm (all other ports)
Max Power Handling (mW)	300

Ordering Information

C1 Part Number	Description
ZS-C1-AFO3-M31-2-3-LP-0-S	CWDM 20GHz spacing, Mux/Demux Pair (Dual Fiber), TFF Thin Film Filter Submersible, 8 Channel, No Connector, Channel 1470 Start, Single module, OSP 70x70x8mm, 2m pigtail, Skip 0, MON 2% M/D, 1310nm wide passband

Network Diagram

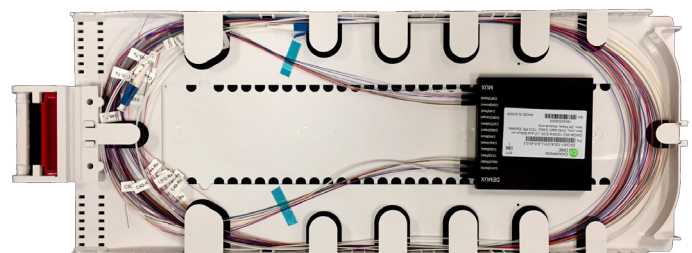


Tray Integration Options

Sample Module in Tyco "B" Tray

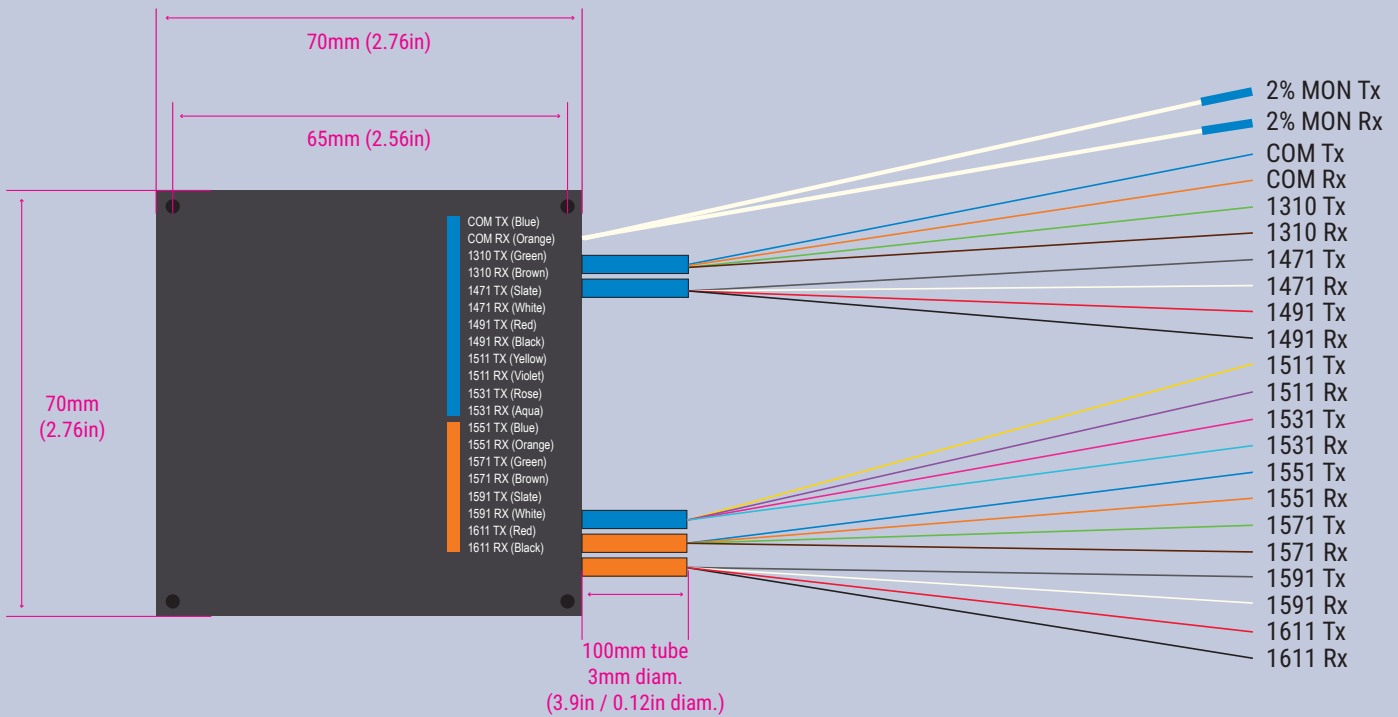


Sample Module in Tyco "D" Tray

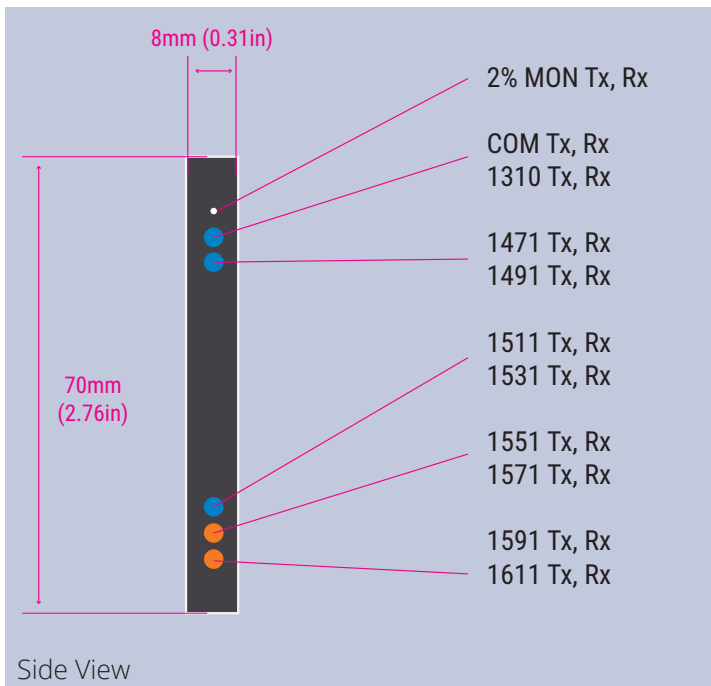


Physical Diagrams and Extended Loss Specifications

ZS-C1-AF03-M31-2-3-LP-0



Top View



Side View

Channel	Typical		Max	
	Mux IL (dB)	Dmx IL (dB)	Mux IL (dB)	Dmx IL (dB)
1310nm	1.3		1.5	
1470nm	1.6	3.1	1.8	3.3
1490nm	1.9	2.9	2.1	3.1
1510nm	2.1	2.7	2.3	2.9
1530nm	2.3	2.5	2.5	2.7
1550nm	2.5	2.3	2.7	2.5
1570nm	2.7	2.1	2.9	2.3
1590nm	2.9	1.9	3.1	2.1
1610nm	3.1	1.6	3.3	1.8