



OUTSIDE PLANT DWDM

KEY FEATURES AND BENEFITS

Champion ONE offers DWDM passive filter modules in either a field-deployable standalone module or tray-mounted for splice enclosures. These modules support the same performance specifications of our inside plant offerings, which simplifies the design considerations of our customers. In addition, Champion ONE can source from any vendor, which allows us to support customers with mixed outside fiber plant vendors. Our optional configurations enable Champion ONE to easily meet the engineering requirements needed for custom projects.

Champion ONE's DWDM outside plant products offer a wide variety of channel configurations, enabling us to easily match "channel plans" used by the switch and router and optical transport system vendors. Champion ONE offers the same filter module for both the inside plant and outside plant infrastructure, which simplifies the design considerations of our customers. Optional configurations allow us to more easily meet the engineering requirements of specific projects.

TECHNICAL SPECIFICATIONS

FEATURES

- Mux/Demuxes, muxes, demuxes and OADMs
- Available in 1 to 40 channel configurations
- Available in single-fiber or dual-fiber configurations
- Monitor (tap) ports are included on all DWDM passives
- Express ports are included on all dual fiber mux/demuxes
- Variety of connector types (LC, SC, FC, etc.)
- UPC or APC connectors
- Splice-ready fibers - color coded, tagged, or other ID
- OADM modules in both unidirectional and east-west configurations to support ring topologies.

FORM FACTORS

Tray-mounted bare filters or cassette-housed units in splice trays as specified by customer

WARRANTY

All feature a limited 5-year warranty

Supported Wavelengths/Channels	Wavelength	ITU Channel	Wavelength	ITU Channel	Wavelength	ITU Channel	Wavelength	ITU Channel	Wavelength	ITU Channel	Wavelength	ITU Channel
	1561.42	20	1555.75	27	1550.12	34	1544.53	41	1538.98	48	1533.47	55
	1560.61	21	1554.94	28	1549.32	35	1543.73	42	1538.19	49	1532.68	56
	1559.79	22	1554.13	29	1548.51	36	1542.94	43	1537.40	50	1531.90	57
	1558.98	23	1553.33	30	1547.72	37	1542.14	44	1536.61	51	1531.12	58
	1558.17	24	1552.52	31	1546.92	38	1541.35	45	1535.82	52	1530.33	59
	1557.36	25	1551.72	32	1546.12	39	1540.56	46	1535.04	53	1529.55	60
	1556.55	26	1550.92	33	1545.32	40	1539.77	47	1534.25	54	1528.77	61

Champion ONE offers 3 channel plans: 4 skip 1, 8 skip 1, and 8 skip 0. Please consult the ordering guide below and contact your Champion ONE account manager.

Parameter (unit)	1 ch. E/W	4 Channel	8 Channel
Channel Spacing (nm)	0.8	0.8	0.8
Channel Bandwidth (nm, min)	+/- 0.12 (min) +/- 0.15 (typ)	+/- 0.12	+/- 0.25
Add Insertion Loss (dB, typ; max)	0.9 (typ) 1.2 (max)	1.6 (typ) 2.0 (max)	2.5 (typ) 3.5 (max)
Drop Insertion Loss (dB, typmax)	0.9 (typ) 1.2 (max)	1.6 (typ) 2.0 (max)	2.5 (typ) 3.5 (max)
Thru Insertion Loss (dB, typ/max)	0.7 (typ) 1.0 (max)	1.6 (typ) 2.0 (max)	2.5 (typ) 3.5 (max)
Channel Uniformity (dB, max)	1.5	1.0	1.5
Adjacent Channel Isolation (dB, typ)	30	30	30

Parameter (unit)	1 ch. E/W	4 Channel	8 Channel
Return Loss (dB)	> 45	> 45	> 45
Directivity (dB)	> 50	> 50	> 50
PDL (dB)	0.1	0.1	0.1
PMD (ps, max)	0.1	0.1	0.1
Wavelength Temperature Sensitivity (nm/°C)	≤ 0.0025	≤ 0.003	≤ 0.003
Thermal Stability (dB/°C)	≤ 0.005	≤ 0.008	≤ 0.008

NOTES: (1) Contact your Champion ONE account manager for operating and storage temperature ranges for your order.
(2) Outside plant trays are usually 8 channels or fewer.

ORDERING INFORMATION

Part Number Scheme:

DWN-MXCOT₁-MXCOT₂-PSWW-DDYY-L

N	Physical Module Count
1	Single Module/Cassette
2	Dual Module/Cassette
0	Bare filter/adhesive mount

M	Module Operation
A	Mux/Demux Pair (Dual Fiber)
B	Multiplexer (mux)
C	Demultiplexer (demux)
D	Single Fiber Mux/Demux
E	OADM
0	N/A (see note below)

x	Channel Spacing
1	100 GHz spacing
2	200 GHz spacing
0	N/A (see note below)

C	Channel Count
1	
2	
4	
8	
16	
20	
32	
40	no upgrade port
0	N/A (see note below)

O	Optional Ports
M	Monitor (Tap)
E	Express Port
C	Monitor and Express
31	1310 passband
0	N/A (see note below)

T	Connector Type
L	LC/UPC
LA	LC/APC
S	SC/UPC
SA	SC/APC
F	FC/UPC
FA	FC/APC
T	ST/UPC
TA	ST/APC
0	N/A (see note below)

P	Channel Plan
4	
8	
N	non-applicable (OADMs)

S	Ch. Skip Plan
0	No Skip
1	
N	non-applicable (OADMs)

ww	Start Channel
16-61	ITU Channel #
N	

Dd	Tray Mfg and Type
P	Preformed Line Products
Pc	PLP Coyote
M	3M Products
Tt	Tyco (t = A,B,C, or D size)
L	Leviton
0	N/A
For other tray manufacturer not listed, please contact your account representative	
YY	A 2-digit code to cross the tray manufacturer part number to the Champion ONE product for ease in ordering (INTERNAL USE ONLY)

L	Pigtail Length
1	1m
2	2m
3	3m

Additional custom lengths may also be available. For more information, please contact your account representative.

NOTES:

For a single-module order (part # beginning with DW1), MXCOT₂ = "00000"

For a bare filter/adhesive mount order (part # beginning with DW0), MXCOT₁ = "00000" and MXCOT₂ = "00000"

SERVICE AND SUPPORT

Running a network or selling network services and products can be a highly competitive endeavor. To help differentiate your business and enable you to provide more cost effective infrastructure, you require a partner that provides competitive pricing and vertical market expertise. At Champion ONE we understand your needs. We leverage our skills and relationships to:

- Provide network design services and help you explore alternative network designs you may not have considered
- Provide technical and sales support when you need it
- Accept orders for same day shipment up to 3:00 PM EST
- Offer some of the longest warranties in the industry
- Offer a 30-day return policy
- Build a long-term supplier partnership with you

You can rely on Champion ONE, not only for the highest levels of availability for the products you need, but the technical support, customer service and cost consideration you deserve. Our goal is your complete satisfaction.

THE CHAMPION ONE COMMITMENT



For over twenty years, we at Champion ONE have been delivering great value to our customers through high-quality products at competitive prices. As one of the leading OEMs of compatible optical transceivers and a major supplier of optical networking solutions, we take great pride in building long-term relationships as a trusted partner. In this spirit, everything we bring to market bears the Champion ONE Shield™, which strengthens this trust through five core promises: Performance, Availability, Compatibility, Protection, and Value.

GLOBAL HEADQUARTERS

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