

NETWORK ACCESSORIES DATA SHEET

2x2 Optical Bypass Module



Champion ONE's 2x2 Optical Bypass Module is an ideal component for monitoring and protecting OADM and OXC systems during power loss. For additional network continuity, operators can select a delay of up to 120 or 180 seconds before the switch resumes its normal mode after power loss to enable the switch to fully power on before resuming network traffic. Our switches offer high performance and low insertion loss in an efficient package that enables painless integration into high-density optical communication systems. Switches are available in both dual and single fiber versions.

These modules are housed in a LGX enclosure and can fit in a 1RU faceplate (sold separately), which holds up to three LGX modules.

Technical Specifications

STANDARDS AND REGULATORY COMPLIANCE

RoHS compliant

DIMENSIONS AND WEIGHT

130.0mm x 130.0mm x 30.0mm (LxWxH); 510g

OPERATING/STORAGE TEMPERATURE RANGE

-20 to 70°C / -40 to 85°C

WARRANTY

All feature a limited 1-year warranty

NOTES

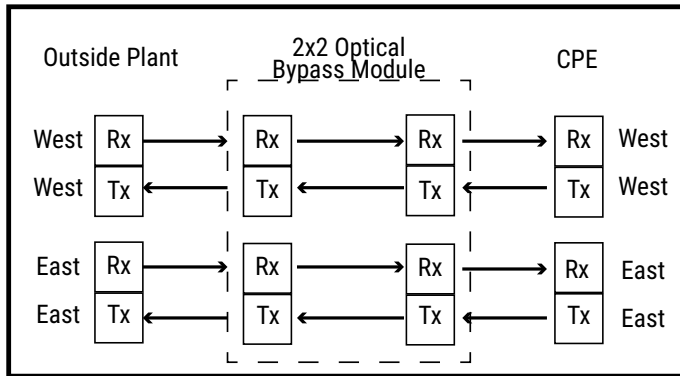
For part numbering schemes and ordering information, consult "Ordering Guide" on page 3.

Parameters (units)	Dual and Single Fiber	
	Multi-Mode	Single-Mode
Wavelength Range (nm)*	850	1260-1650
Insertion Loss (dB)	0.8 (typical) 1.2 (maximum)	0.6 (typical) 1.0 (maximum)
Return Loss (dB)	≥30	≥50
Crosstalk (dB)	≥30	≥50
PDL / WDL / TDL (dB)	≤0.05 / ≤0.25 / ≤0.25	
Repeatability (dB)	≤0.02	
Power Supply (V)*	3.0 or 5.0	
Lifetime (times)	≥10 ⁷	
Switch Time (ms)	≤8	
Delay Time, Resume Normal Mode (s)*	0, 60, 120 (selectable via DIP switch) 0, 120, 180 (selectable via DIP switch)	
Transmission Power (mW)	≤500	
Control Type*	Latching or Non-Latching	
Fiber Diameter (µm)*	250 or 900	

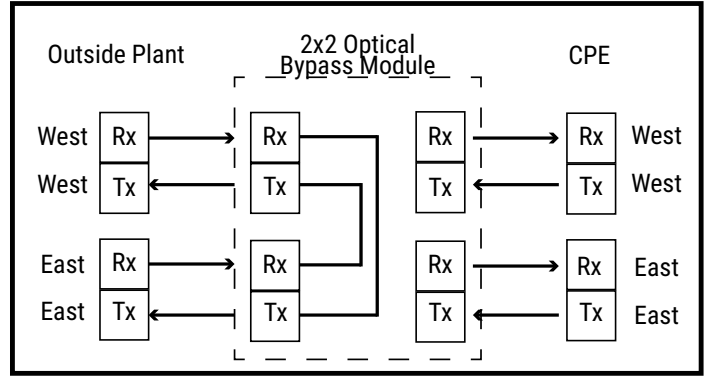
* Selectable via ordering guide on page 4.

Dual Fiber 2x2 Optical

Normal Mode

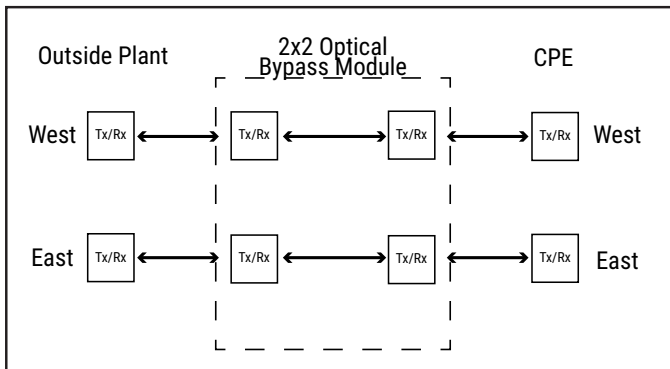


Bypass Mode

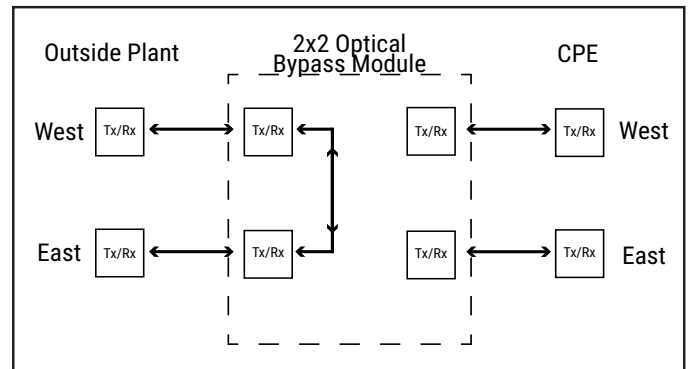


Single Fiber 2x2 Optical Switch

Normal Mode



Bypass Mode



Ordering Guide

DUAL FIBER PART NUMBERING SCHEME:

FMC-MWWV-TFDD-CC(-R2)

SINGLE FIBER PART NUMBERING SCHEME:

FMC-1MWWV-TFDD-CC(-R2)

M	Mode
M	Multi-mode
S	Single-mode

V	Voltage
3	3.0 V
5	5.0 V

DD	Fiber Diameter
25	250µm
90	900µm

R2	Delay Time
(N/A)	0, 60, 120 seconds
-R2	0, 120, 180 seconds

WW	Wavelength (nm)
85	850
31	1310
49	1490
55	1550
62	1625
65	1650
35	1310/1550

T	Control Type
L	Latching
N	Non-Latching

CC	Connector
OO	None
FP	FC/PC
FA	FC/APC
SP	SC/PC
SA	SC/APC
TP	ST/PC
TA	ST/APC
LP	LC/PC
LA	LC/APC

F	Fiber Type
5	50/125
6	62.5/125
9	9/125

Accessories

For convenient deployment in a standard 19" rack, Champion ONE also offers a 1RU Faceplate with 3 LGX slots (ordered separately from mux).



Parameter	Value
C1 Part Number	LGX1R-FACEPLATE
Dimensions	Fits 19" rack x 1RU (482.6mm x 44mm)