

## PASSPORT DATA SHEET

# Single Fiber CWDM SFP



Champion ONE's single fiber or bi-directional (bidi) CWDM transceivers can serve as a direct replacement for dual-fiber SFP CWDM optics. These "hi-lo" optics transmit and receive on wavelengths just above and below the standard CWDM wavelengths. With these optics, you can add up to 8 working services without running new fiber, thereby reducing your fiber installation or lease costs and optimizing your fiber plant.

*Champion ONE **Passport** transceivers are programmed for universal compatibility across multiple OEM platforms. This open methodology reduces costs and unlocks operational simplicity by reducing sparing costs.*

## Technical Specifications

### STANDARDS AND REGULATORY COMPLIANCE

RoHS compliant  
SFP MSA (mutli-source agreement)  
IEEE Std 802.3  
Fibre Channel Draft Physical Interface Specification  
Compliant with SONET/SDH optical standards

### PROTOCOLS AND DATA RATES

#### 20km

Gigabit Ethernet (1.25 Gbps)  
2G Fibre Channel  
CPRI Line Rate Option 3 (2.457Gbps)  
SONET OC-48

#### 40km

Gigabit Ethernet (1.25 Gbps)  
1G Fibre Channel  
CPRI Line Rate Option 3  
(1.229Gbps)

### CONNECTOR

Simplex LC connector

### WARRANTY

All feature a limited 5-year warranty

### NOTES

Available in standard (C-temp) or "temperature-hardened" (-40 to 85° C)

C1 Part Number	Center Wavelengths (nm)	Fiber Type	Rated Distance (km)	Temp Range (°C)	Hardened Option Available?¹	Description	Output Power (min/max) (dBm)	Receiver Sensitivity (dBm)	Max. Input Power (dBm)
<b>SONET OC-48 (2.488 GBPS) / 2G FIBRE CHANNEL / 1G ETHERNET/CPRI LINE RATE OPTION 3</b>									
2500SFP47xB20L	1467Tx/1476Rx (x = L) 1476Tx/1467Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1470nm H or L, 20km rated	-4 to 1	-19	1
2500SFP49xB20L	1487Tx/1496Rx (x = L) 1496Tx/1487Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1490nm H or L, 20km rated	-4 to 1	-19	1
2500SFP51xB20L	1507Tx/1516Rx (x = L) 1516Tx/1507Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1510nm H or L, 20km rated	-4 to 1	-19	1
2500SFP53xB20L	1527Tx/1536Rx (x = L) 1536Tx/1527Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1530nm H or L, 20km rated	-4 to 1	-19	1
2500SFP55xB20L	1547Tx/1556Rx (x = L) 1556Tx/1547Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1550nm H or L, 20km rated	-4 to 1	-19	1
2500SFP57xB20L	1567Tx/1576Rx (x = L) 1576Tx/1567Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1570nm H or L, 20km rated	-4 to 1	-19	1

C1 Part Number	Center Wavelengths (nm)	Fiber Type	Rated Distance (km)	Temp Range (°C)	Hardened Option Available?¹	Description	Output Power (min/max) (dBm)	Receiver Sensitivity (dBm)	Max. Input Power (dBm)
<b>SONET OC-48 (2.488 GBPS) / 2G FIBRE CHANNEL / 1G ETHERNET/CPRI LINE RATE OPTION 3</b>									
2500SFP59xB20L	1587Tx/1596Rx (x = L) 1596Tx/1587Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1590nm H or L, 20km rated	-4 to 1	-19	1
2500SFP61xB20L	1607Tx/1616Rx (x = L) 1616Tx/1607Rx (x = H)	SMF	20	0 to 70	Yes	Multi-rate CWDM SF SFP, 1610nm H or L, 20km rated	-4 to 1	-19	1
<b>GIGABIT ETHERNET (1.25 GBPS) / 1G FIBRE CHANNEL</b>									
1000SFP47xB40L	1467Tx/1476Rx (x = L) 1476Tx/1467Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1470nm H or L, 40km rated	-4 to 1	-22	1
1000SFP49xB40L	1487Tx/1496Rx (x = L) 1496Tx/1487Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1490nm H or L, 40km rated	-4 to 1	-22	1
1000SFP51xB40L	1507Tx/1516Rx (x = L) 1516Tx/1507Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1510nm H or L, 40km rated	-4 to 1	-22	1
1000SFP53xB40L	1527Tx/1536Rx (x = L) 1536Tx/1527Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1530nm H or L, 40km rated	-4 to 1	-22	1
1000SFP55xB40L	1547Tx/1556Rx (x = L) 1556Tx/1547Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1550nm H or L, 40km rated	-4 to 1	-22	1
1000SFP57xB40L	1567Tx/1576Rx (x = L) 1576Tx/1567Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1570nm H or L, 40km rated	-4 to 1	-22	1
1000SFP59xB40L	1587Tx/1596Rx (x = L) 1596Tx/1587Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1590nm H or L, 40km rated	-4 to 1	-22	1
1000SFP61xB40L	1607Tx/1616Rx (x = L) 1616Tx/1607Rx (x = H)	SMF	40	0 to 70	Yes	1GbE/1G FC CWDM SF SFP, 1610nm H or L, 40km rated	-4 to 1	-22	1
<b>MULTI-RATE CPRI LINE RATE OPTION 3 (622M-2.5G)/GIGABIT ETHERNET</b>									
MR-SFP47xB40L	1467Tx/1476Rx (x = L) 1476Tx/1467Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1470nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP49xB40L	1487Tx/1496Rx (x = L) 1496Tx/1487Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1490nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP51xB40L	1507Tx/1516Rx (x = L) 1516Tx/1507Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1510nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP53xB40L	1527Tx/1536Rx (x = L) 1536Tx/1527Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1530nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP55xB40L	1547Tx/1556Rx (x = L) 1556Tx/1547Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1550nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP57xB40L	1567Tx/1576Rx (x = L) 1576Tx/1567Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1570nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP59xB40L	1587Tx/1596Rx (x = L) 1596Tx/1587Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1590nm H or L, 40km rated	-2 to 3	-24	-7
MR-SFP61xB40L	1607Tx/1616Rx (x = L) 1616Tx/1607Rx (x = H)	SMF	40	0 to 70	Yes	Multi-Rate CWDM SF SFP, 1610nm H or L, 40km rated	-2 to 3	-24	-7

**Notes:**

1. Hardened Option - operating temperature range is -40 to +85°C (-40 to +185°F). Optical specifications are the same. Part number has a "-H" suffix.  
Example: **1000SFP47xB40L-H**.

Wavelength	Color
1470nm	Gray
1490nm	Violet
1510nm	Blue
1530nm	Green

Wavelength	Color
1550nm	Yellow
1570nm	Orange
1590nm	Red
1610nm	Brown