

## PASSPORT DATA SHEET

# CWDM SFP



Champion ONE's SFP CWDM transceivers offer direct compatibility with existing switches and routers. These optics can be used as part of a passive CWDM solution that enables network operators to cost-effectively expand their fiber capacity. While our CWDM SFPs are typically available in the standard ITU CWDM range (1470 to 1610 nm, 20nm spacing), lower CWDM wavelengths (1450nm and below) are available upon request.

*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  
 IEEE Std 802.3 (Gigabit Ethernet 802.3z, 802.3ah, FastE 802.3u)  
 Fibre Channel Draft Physical Interface Specification FC-PI-2  
 Compliant with SONET/SDH optical standards  
 SFP MSA (multi-source agreement)

### PROTOCOLS AND DATA RATES

Fast Ethernet (125Mbps)  
 Gigabit Ethernet (1.25Gbps)  
 1G and 2G Fibre Channel  
 SONET OC-3 (155Mbps), OC-12 (622Mbps),  
 and OC-48 (2.488Gbps)

### CONNECTOR

Duplex LC connector

### WARRANTY

All feature a limited 5-year warranty

### NOTES

Available in standard and 'hardened' temperature

C1 Part Number	Wavelength (nm)	Fiber Type	Rated Distance (km)	Temp Range (°C)	Hardened Option Available <sup>1</sup>	Description	Output Power (min/max) (dBm)	Receiver Sensitivity (dBm)	Max. Input Power (dBm)
<b>MULTI-RATE CAPABLE<sup>2</sup> (SONET OC-48/OC-12/OC-3, 1G AND 2G FIBRE CHANNEL, GIGABIT AND FAST ETHERNET<sup>3</sup>)</b>									
2500SFP1xx0CWDM40	1470 to 1610 (xx=47 to xx=61)	SMF	40	0 to 70	Yes	Multirate CWDM SFP, 1xx0nm, 40km rated	-2 / 4	-15.5	-1
2500SFP1xx0CWDM80	1470 to 1610 (xx=47 to xx=61)	SMF	80	0 to 70	Yes	Multirate CWDM SFP, 1xx0nm, 80km rated	0 / 5	-28	-9
<b>GIGABIT ETHERNET, 1G FIBRE CHANNEL</b>									
1000SFP1xx0CWDM40R2	1270 to 1450 (xx=27 to xx=45)	SMF	40	0 to 70	Yes	40km Gigabit Ethernet CWDM SFP, 1xx0nm Revision 2	-5 / 4	-24	-3
1000SFP1xx0CWDM40R2	1470 to 1610 (xx=47 to xx=61)	SMF	40	-5 to 75	Yes	40km Gigabit Ethernet CWDM SFP, 1xx0nm Revision 2	-3 / 2	-22	0
1000SFP1xx0CWDM80	1470 to 1610 (xx=47 to xx=61)	SMF	80	0 to 70	No	80km CWDM SFP, 1xx0nm (APD receiver)	1 / 5	-29	-7
1000SFP1xx0CWDM80R2	1470 to 1610 (xx=47 to xx=61)	SMF	80	0 to 70	Yes	80km CWDM SFP, 1xx0nm Revision 2 (PIN receiver)	0 / 5	-24	0

C1 Part Number	Wavelength (nm)	Fiber Type	Rated Distance (km)	Temp Range (°C)	Hardened Option Available <sup>1</sup>	Description	Output Power (min/max) (dBm)	Receiver Sensitivity (dBm)	Max. Input Power (dBm)
1000SFP1xx0CWDM120R2	1470 to 1610 (xx=47 to xx=61)	SMF	120	0 to 70	Yes	120km CWDM SFP, 1xx0nm, 1470-1610nm Revision 2	0 / 5	-32	-5
1000SFP1xx0CWDM160	1470 to 1610 (xx=47 to xx=61)	SMF	160	0 to 70	No	160km CWDM SFP, 1xx0nm, very long haul	-4 / 7	-36	-9
<b>LOWER MULTI-RATE CAPABLE (SONET OC-12/OC-3 AND FAST ETHERNET<sup>3</sup>)</b>									
CWDM-OC12-SFP-xx-LR1	1470 to 1610 (xx=47 to xx=61)	SMF	40	-5 to 75	Yes	40km CWDM SFP, 1xx0nm, OC-12 (LR-1/IR-2)	-5 / 0	-27	0
CWDM-OC3-SFP-xx-LR2	1470 to 1610 (xx=47 to xx=61)	SMF	80	0 to 70	No	80km CWDM SFP, 1xx0nm, OC-3 (LR-2)	0 / 5	-31	-10
CWDM-OC12-SFP-xx-LR2	1470 to 1610 (xx=47 to xx=61)	SMF	80	-5 to 75	Yes	80km CWDM SFP, 1xx0nm, OC-12 (LR-2)	0 / 5	-29	0

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: 1000SFP1470CWDM80R2-H
2. Multi-rate transceivers will not operate in all platforms at all data rates listed. Contact your account representative for platform-specific questions.
3. Fast Ethernet Compatible. Tested to Bellcore GR-253 and ITU-T G.957 Specifications for SONET OC-3/SDH STM-1 applications.

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

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