



## Features

- SFP MSA compliant
- 1.25, 2.5, 3.125 Gbps data rates
- Distances up to 70 km
- Singlemode and multimode
- Duplex LC optical connectors
- SONET OC-48/SDH-16 compliant
- Class 1 laser safety compliant
- Hot-pluggable
- -20C to +70C operating temperature range
- -40C to +85C storage temperature range
- 0 to 90% humidity, non-condensing

## Applications

- Optical switch interface ports
- OC-48/STM-16 equipment
- Switch to switch interface

## Compliance

**FCC** PART 15 COMPLIANT



## SFP Modules Design

EMCORE offers a range of Small Form-factor Pluggable (SFP) transceiver modules. When integrated within EMCORE's systems, our SFPs provide for optical wavelength conversion, switching, routing, optical budget amplification and optical switch ports. EMCORE SFPs are MSA compliant.

SFP models are available that can accommodate multimode and singlemode fiber, differing optical link budgets (distances), and different optical wavelengths.

- Multimode SFPs are available at 1310 nm
- Singlemode SFPs are available in 1310 nm and 1550 nm
- All CWDM wavelengths in the range of 1270 nm to 1610 nm.

Within EMCORE optical fiber transmission networks, SFPs provide the optical interface (input and output) for the EMX and OMX optical physical layer switches. Each SFP transceiver module provides the physical ports for one input and one output. Each port input provides an option of data retiming or bypass of retiming.

SFPs may be utilized within EMX and OMX switches to achieve multiple configurations of the non-blocking cross-point physical layer switch. As a result of the multiple models of SFPs, the switches may also facilitate wavelength and media conversion.

## SFP OPTICAL PORT CARD

Multimode, Singlemode & CWDM

### OMX-SFP-B

Specifications	Values
Media Conversion	Yes
Status Indicators	LED front panel power
Data Rate	Multi-rate repeating up to 4.25 Gbps
Dimensions	16.5" (W) x 3.9" (D) x 1" (H) 41.9 cm (W) x 9.9 cm (D) x 2.5 cm (H)
Physical Interfaces	SFP x 16
Form Factor	SFP MSA compliant only

### OMX-SFP-B-R

Specifications	Values
Media Conversion	Yes
Status Indicators	LED front panel power
Data Rate	Multi-rate Reclocking 1.25/2.5/3.125 Gbps
Dimensions	16.5" (W) x 3.9" (D) x 1" (H) 41.9 cm (W) x 9.9 cm (D) x 2.5 cm (H)
Physical Interfaces	SFP x 16
Form Factor	SFP MSA compliant only

## OMX-SFP-B Models

SFP Modules	Wavelength & Fiber	Data Rate (Gbps)	Optical Budget (dB)	Range (km)
SFP-1310-MM-4250-10	1310 nm Multimode	4.250	10	1.5
SFP-1310-SM-4250-07	1310 nm Singlemode	4.250	7	10
SFP-1310-SM-4250-14	1310 nm Singlemode	4.250	14	20
SFP-1550-SM-4250-17	1550 nm Singlemode	4.250	17	40
SFP-1550-SM-4250-25	1550 nm Singlemode	4.250	25	60
SFP-1270-CWDM-4250-25	1270 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1290-CWDM-4250-25	1290 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1310-CWDM-4250-25	1310 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1330-CWDM-4250-25	1330 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1350-CWDM-4250-25	1350 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1370-CWDM-4250-25	1370 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1390-CWDM-4250-25	1390 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1410-CWDM-4250-25	1410 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1430-CWDM-4250-25	1430 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1450-CWDM-4250-25	1450 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1470-CWDM-4250-25	1470 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1490-CWDM-4250-25	1490 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1510-CWDM-4250-25	1510 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1530-CWDM-4250-25	1530 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1550-CWDM-4250-25	1550 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1570-CWDM-4250-25	1570 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1590-CWDM-4250-25	1590 nm CWDM Singlemode	4.250	25	≤ 70
SFP-1610-CWDM-4250-25	1610 nm CWDM Singlemode	4.250	25	≤ 70

## OMX-SFP-B-R Models

SFP Modules	Wavelength & Fiber	Data Rate (Gbps)	Optical Budget (dB)	Range (km)
SFP-1310-MM-1250-10	1310 nm Multimode	1.250	10	1.5
SFP-1310-MM-2500-10	1310 nm Multimode	2.500	10	1.5
SFP-1310-MM-3125-10	1310 nm Multimode	3.125	10	1.5
SFP-1310-SM-1250-07	1310 nm Singlemode	1.250	7	10
SFP-1310-SM-2500-07	1310 nm Singlemode	2.500	7	10
SFP-1310-SM-3125-07	1310 nm Singlemode	3.125	7	10
SFP-1310-SM-1250-14	1310 nm Singlemode	1.250	14	20
SFP-1310-SM-2500-14	1310 nm Singlemode	2.500	14	20
SFP-1310-SM-3125-14	1310 nm Singlemode	3.125	14	20
SFP-1550-SM-1250-17	1550 nm Singlemode	1.250	17	40
SFP-1550-SM-2500-17	1550 nm Singlemode	2.500	17	40
SFP-1550-SM-3125-17	1550 nm Singlemode	3.125	17	40
SFP-1550-SM-1250-25	1550 nm Singlemode	1.250	25	60
SFP-1550-SM-2500-25	1550 nm Singlemode	2.500	25	60
SFP-1550-SM-3125-25	1550 nm Singlemode	3.125	25	60
SFP-1270-CWDM-1250-25	1270 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1270-CWDM-2500-25	1270 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1270-CWDM-3125-25	1270 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1290-CWDM-1250-25	1290 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1290-CWDM-2500-25	1290 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1290-CWDM-3125-25	1290 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1310-CWDM-1250-25	1310 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1310-CWDM-2500-25	1310 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1310-CWDM-3125-25	1310 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1330-CWDM-1250-25	1330 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1330-CWDM-2500-25	1330 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1330-CWDM-3125-25	1330 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1350-CWDM-1250-25	1350 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1350-CWDM-2500-25	1350 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1350-CWDM-3125-25	1350 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1370-CWDM-1250-25	1370 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1370-CWDM-2500-25	1370 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1370-CWDM-3125-25	1370 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1390-CWDM-1250-25	1390 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1390-CWDM-2500-25	1390 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1390-CWDM-3125-25	1390 nm CWDM Singlemode	3.125	25	≤ 70

## OMX-SFP-B-R Models (Continued)

SFP Modules	Wavelength & Fiber	Data Rate (Gbps)	Optical Budget (dB)	Range (km)
SFP-1410-CWDM-1250-25	1410 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1410-CWDM-2500-25	1410 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1410-CWDM-3125-25	1410 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1430-CWDM-1250-25	1430 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1430-CWDM-2500-25	1430 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1430-CWDM-3125-25	1430 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1450-CWDM-1250-25	1450 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1450-CWDM-2500-25	1450 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1450-CWDM-3125-25	1450 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1470-CWDM-1250-25	1470 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1470-CWDM-2500-25	1470 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1470-CWDM-3125-25	1470 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1490-CWDM-1250-25	1490 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1490-CWDM-2500-25	1490 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1490-CWDM-3125-25	1490 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1510-CWDM-1250-25	1510 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1510-CWDM-2500-25	1510 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1510-CWDM-3125-25	1510 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1530-CWDM-1250-25	1530 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1530-CWDM-2500-25	1530 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1530-CWDM-3125-25	1530 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1550-CWDM-1250-25	1550 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1550-CWDM-2500-25	1550 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1550-CWDM-3125-25	1550 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1570-CWDM-1250-25	1570 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1570-CWDM-2500-25	1570 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1570-CWDM-3125-25	1570 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1590-CWDM-1250-25	1590 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1590-CWDM-2500-25	1590 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1590-CWDM-3125-25	1590 nm CWDM Singlemode	3.125	25	≤ 70
SFP-1610-CWDM-1250-25	1610 nm CWDM Singlemode	1.250	25	≤ 70
SFP-1610-CWDM-2500-25	1610 nm CWDM Singlemode	2.500	25	≤ 70
SFP-1610-CWDM-3125-25	1610 nm CWDM Singlemode	3.125	25	≤ 70