

SFP+ Transceiver technical info and data sheets



The enhanced small form-factor pluggable (SFP+) is an enhanced version of the SFP that supports data rates up to 10 Gbit/s. The SFP+ specification was first published on May 9, 2006, and version 4.1 published on July 6, 2009. SFP+ supports 8 Gbit/s Fibre Channel, 10 Gigabit Ethernet and Optical Transport Network standard OTU2. It is a popular industry format supported by many network component vendors.

In comparison to earlier XENPAK or XFP modules, SFP+ modules leave more circuitry to be implemented on the host board instead of inside the module.

SFP+ also introduces Direct Attach for connecting two SFP+ ports without dedicated transceivers.

SFP transceivers are available with a variety of transmitter and receiver types, allowing users to select the appropriate transceiver for each link to provide the required optical reach over the available optical fiber type (e.g. multi-mode fiber or single-mode fiber). Optical SFP modules are commonly available in several different categories:

for multi-mode fiber, with black or beige extraction lever SX - 850 nm, for a maximum of 550 m at 1.25 Gbit/s (Gigabit Ethernet) or 150m at 4.25 Gbit/s (Fibre Channel)

for single-mode fiber, with blue extraction lever LX - 1310 nm, for distances up to 10 km

EX - 1310 nm, for distances up to 40 km

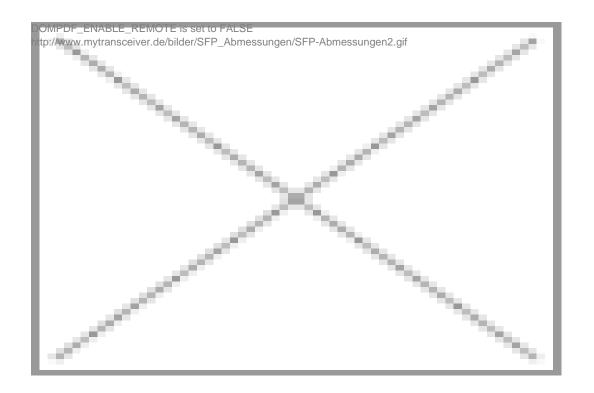
ZX - 1550 nm, for distances up to 80 km, with green extraction lever

EZX - 1550 nm, for distances up to 120 km

BX - 1490 nm/1310 nm, Single Fiber Bi-Directional Gigabit SFP Transceivers, paired as BS-U and BS-D for Uplink and Downlink respectively, also for distances up to 10 km. Variations of bidirectional SFPs are also manufactured which use 1550 nm in one direction.

1550 nm 40 km (XD), 80 km (ZX), 120 km (EX or EZX)

SFP+ casing (mm)



SFP+ Transceiver data sheets

description	rate	reach	wave
6.25 Gb/s 1310nm Single-mode SFP+ Transceiver	6.25Gb/s	10KM	1310
6.25Gb/s 1310nm Single-mode SFP+ Transceiver	6.25Gb/s	?2KM	1310
10Gb/s 1310nm Multimode SFP+ LRM Transceiver	10.3125Gb/s	?2KM	1310
10Gb/s 850nm Multi-mode SFP+ SR Transceiver	10.3125Gb/s	?2KM	850n
10Gb/s 80Km SFP+ ZR Optical Receiver	10.3125Gb/s	80KM	1550
10Gb/s 80Km SFP+ ZR Optical Transceiver	10.3125Gb/s	80KM	1550
10Gb/s 1550nm Single-mode SFP+ Transceiver	10.3125Gb/s	40KM	1550
10Gb/s 1310nm Single-mode SFP+ ER Transceiver	10.3125Gb/s	40KM	1310
10Gb/s 1310nm Single-mode SFP+ LR Receiver	10.3125Gb/s	10KM	1310
10Gb/s 1310nm Single-mode SFP+ Transceiver	10.3125Gb/s	10KM	1310
10Gb/s 1310nm Single-mode SFP+ Transceiver	10.3125Gb/s	10KM	1310
10Gb/s 1310nm Single-mode SFP+ Transceiver	10.3125Gb/s	?2KM	1310
8.5Gb/s 850nm Multi-mode SFP+ Transceiver	8.5Gb/s	?2KM	850n
8.5Gb/s Single-mode SFP+ Transceiver	8.5Gb/s	10KM	1310