

SFP Fiber Transceivers Series



Value

- › All SFPs have been tested with the best operating performance on EtherWAN switches
- › Gigabit Ethernet applications and are compliant to IEEE802.3z
- › The characteristics are performed in accordance with Telcordia Specification GR-468-CORE

Features

- › Data Rate: 1.25Gbps, NRZ
- › Single +3.3V Power Supply
- › RoHS Compliant and Lead-free
- › AC/AC Differential Electrical Interface
- › Eye Safety Designed to meet Laser Class 1 comply with EN60825-1
- › Compliant with Multi-Source Agreement (MSA) Small Form Factor Pluggable (SFP)
- › Compliance with specifications for IEEE-802.3z Gigabit Ethernet at 1.25 Gbps
- › EMC requirement meets FCC in the United States and CENELEC EN55022 (CISPR 22) in Europe

Ordering Information

Non-Hardened SFP Series

Model Number	Designation	Distance	Cable Type	Wavelength (nm)	Connector Type	Link Budget
EXFE-R1S4-05H1	100BASE-TX	100m	-	-	TX	-
EX-0155NSP-MB2L	100BASE-MM	2Km	62.5/125µm, MM	1310	Duplex LC	13 dBm
EX-0155TSP-MB5L	100BASE-SM	15Km	9/125µm, SM	1310	Duplex LC	17 dBm
EX-0155TSP-MB6L	100BASE-SM	40Km	9/125µm, SM	1310	Duplex LC	29 dBm
EX38-A3S-TC-N-B3	100BASE-MM	2Km	62.5/125 µm/ 50/125 µm, MM	TX:1310 / RX:1550	Single LC	18 dBm
EX48-A3S-TC-N-B5	100BASE-MM	2Km	62.5/125 µm/ 50/125 µm, MM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB5L	100BASE-SM	20Km	9/125µm, SM	TX:1310 / RX:1550	Single LC	18 dBm
EX-0155TBP-LB5L	100BASE-SM	20Km	9/125µm, SM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB6L	100BASE-SM	40Km	9/125µm, SM	TX:1310 / RX:1550	Single LC	26 dBm
EX-0155TBP-KB6L	100BASE-SM	40Km	9/125µm, SM	TX:1550 / RX:1310	Single LC	26 dBm
EX-1250NSP-SB1L	1000BASE-SX	275M/ 550M	62.5/125 µm/ 50/125 µm, MM	850	Duplex LC	7.5 dBm
EX-1250TSP-MB2L	1000BASE-SX	2KM	62.5/125µm, MM	1310	Duplex LC	13.5 dBm
EX-1250TSP-MB4L	1000BASE-LX	10KM	9/125µm, SM	1310	Duplex LC	11.5 dBm
EX-1250TSP-MB5L	1000BASE-LX	20KM	9/125µm, SM	1310	Duplex LC	15 dBm
EX-1250TSP-NB6L	1000BASE-LX	40KM	9/125µm, SM	1310	Duplex LC	20 dBm
EX-1250TSP-KB8L	1000BASE-LX	70KM	9/125µm, SM	1550	Duplex LC	23 dBm
EX-1250TSP-CB8L	1000BASE-LX	70KM	9/125µm, SM	1550	Duplex LC	24 dBm
EX-1250TBP-MB1L	1000BASE-BX WDM	550M	62.5/125 µm/ 50/125 µm, MM	TX:1310 / RX:1550	Single LC	7 dBm
EX-1250TBP-LB1L	1000BASE-BX WDM	550M	62.5/125 µm/ 50/125 µm, MM	TX:1550 / RX:1310	Single LC	7 dBm
EX-1250TBP-MB4L	1000BASE-BX WDM	10KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	12 dBm
EX-1250TBP-KB4L	1000BASE-BX WDM	10KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	12 dBm
EX-1250TBP-MB5L	1000BASE-BX WDM	20KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	15 dBm
EX-1250TBP-KB5L	1000BASE-BX WDM	20KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	15 dBm
EX-1250TBP-NB6L-D	1000BASE-BX WDM	40KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	20 dBm
EX-1250TBP-KB6L-D	1000BASE-BX WDM	40KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	20 dBm
EX-1250TBP-NB7L-D	1000BASE-BX WDM	60KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	25 dBm
EX-1250TBP-KB7L-D	1000BASE-BX WDM	60KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	23 dBm
EX-1250TBP-CB8L-D (1490nm)	1000BASE-BX WDM	80KM	9/125µm, SM	TX:1490 / RX:1570	Single LC	24 dBm
EX-1250TBP-CB8L-D (1570nm)	1000BASE-BX WDM	80KM	9/125µm, SM	TX:1570 / RX:1490	Single LC	24 dBm

Hardened SFP Series

Model Number	Designation	Distance	Cable Type	Wavelength (nm)	Connector Type	Link Budget
EX-0155NSP-MB2L-A	100BASE-MM	2Km	62.5/125µm, MM	1310	Duplex LC	13 dBm
EX-0155TSP-MB5L-A	100BASE-SM	15Km	9/125µm, SM	1310	Duplex LC	19 dBm
EX-0155TSP-MB6L-A	100BASE-SM	40Km	9/125µm, SM	1310	Duplex LC	30 dBm
EX38-A3S-TI-N-B3	100BASE-MM	2Km	62.5/125 µm/ 50/125 µm, MM	TX:1310 / RX:1550	Single LC	18 dBm
EX48-A3S-TI-N-B5	100BASE-MM	2Km	62.5/125 µm/ 50/125 µm, MM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB5L-A	100BASE-SM	20Km	9/125µm, SM	TX:1310 / RX:1550	Single LC	18 dBm
EX-0155TBP-LB5L-A	100BASE-SM	20Km	9/125µm, SM	TX:1550 / RX:1310	Single LC	18 dBm
EX-0155TBP-MB6L-A	100BASE-SM	40Km	9/125µm, SM	TX:1310 / RX:1550	Single LC	26 dBm
EX-0155TBP-KB6L-A	100BASE-SM	40Km	9/125µm, SM	TX:1550 / RX:1310	Single LC	26 dBm
EX-1250NSP-SB1L-A	1000BASE-SX	275M/ 550M	62.5/125 µm/ 50/125 µm, MM	850	Duplex LC	7.5 dBm
EX-1250TSP-MB2L-A	1000BASE-SX	2KM	62.5/125µm, MM	1310	Duplex LC	13.5 dBm
EX-1250TSP-MB4L-A	1000BASE-LX	10KM	9/125µm, SM	1310	Duplex LC	11.5 dBm
EX-1250TSP-MB5L-A	1000BASE-LX	20KM	9/125µm, SM	1310	Duplex LC	15 dBm
EX-1250TSP-NB6L-A	1000BASE-LX	40KM	9/125µm, SM	1310	Duplex LC	20 dBm
EX-1250TSP-KB8L-A	1000BASE-LX	70KM	9/125µm, SM	1550	Duplex LC	23 dBm
EX-1250TBP-MB1L-A	1000BASE-BX WDM	550M	62.5/125 µm/ 50/125 µm, MM	TX:1310 / RX:1550	Single LC	7 dBm
EX-1250TBP-LB1L-A	1000BASE-BX WDM	550M	62.5/125 µm/ 50/125 µm, MM	TX:1550 / RX:1310	Single LC	7 dBm
EX-1250TBP-MB4L-A	1000BASE-BX WDM	10KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	12 dBm
EX-1250TBP-KB4L-A	1000BASE-BX WDM	10KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	12 dBm
EX-1250TBP-MB5L-A	1000BASE-BX WDM	20KM	9/125µm, SM	TX:1310 / RX:1550	Single LC	15 dBm
EX-1250TBP-KB5L-A	1000BASE-BX WDM	20KM	9/125µm, SM	TX:1550 / RX:1310	Single LC	15 dBm

SFP Fiber Transceivers Specifications

Specifications of Non-Hardened SFP Fiber Transceiver

Model Number	Product Information						
	Connector Type	Wavelength (nm)	Distance	Link Budget	Optical Output Power	Sensitivity	Case Operating Temperature
EXFE-R1S4-05H1	TX	-	100m	-	-	-	0°C to 70°C (32+°F to 158°F)
EX-0155NSP-MB2L	Duplex LC	1310	2Km	13 dBm	-19 to -14 dBm	-32 dBm	
EX-0155TSP-MB5L	Duplex LC	1310	15Km	17 dBm	-15 to -8 dBm	-32 dBm	
EX-0155TSP-MB6L	Duplex LC	1310	40Km	29 dBm	-5 to 0 dBm	-34 dBm	
EX38-A3S-TC-N-B3	Single LC	TX:1310 / RX:1550	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX48-A3S-TC-N-B5	Single LC	TX:1550 / RX:1310	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX-0155TBP-MB5L	Single LC	TX:1310 / RX:1550	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-LB5L	Single LC	TX:1550 / RX:1310	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-MB6L	Single LC	TX:1310 / RX:1550	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-0155TBP-KB6L	Single LC	TX:1550 / RX:1310	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-1250NSP-SB1L	Duplex LC	850	275M (62.5/125 µm)/ 550M (50/125 µm), MM	7.5 dBm	-9.5 to -4 dBm	-17 dBm	
EX-1250TSP-MB2L	Duplex LC	1310	2KM (62.5/125 µm), MM	13.5 dBm	-9.5 to -3 dBm	-23 dBm	
EX-1250TSP-MB4L	Duplex LC	1310	10KM (9/125µm), SM	11.5 dBm	-9.5 to -3 dBm	-21 dBm	
EX-1250TSP-MB5L	Duplex LC	1310	20KM (9/125µm), SM	15 dBm	-9 to -3 dBm	-24 dBm	
EX-1250TSP-NB6L	Duplex LC	1310	40KM (9/125µm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TSP-KB8L	Duplex LC	1550	70KM (9/125µm), SM	23 dBm	0 to +5 dBm	-23 dBm	
EX-1250TSP-CB8L	Duplex LC	1550	70KM (9/125µm), SM	24 dBm	0 to +5 dBm	-24 dBm	
EX-1250TBP-MB1L	Single LC	TX:1310 / RX:1550	550M (62.5/125 µm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-LB1L	Single LC	TX:1550 / RX:1310	550M (62.5/125 µm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-MB4L	Single LC	TX:1310 / RX:1550	10KM (9/125µm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-KB4L	Single LC	TX:1550 / RX:1310	10KM (9/125µm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-MB5L	Single LC	TX:1310 / RX:1550	20KM (9/125µm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-KB5L	Single LC	TX:1550 / RX:1310	20KM (9/125µm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-NB6L-D	Single LC	TX:1310 / RX:1550	40KM (9/125µm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TBP-KB6L-D	Single LC	TX:1550 / RX:1310	40KM (9/125µm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TBP-NB7L-D	Single LC	TX:1310 / RX:1550	60KM (9/125µm), SM	25 dBm	0 to +5 dBm	-23 dBm	
EX-1250TBP-KB7L-D	Single LC	TX:1550 / RX:1310	60KM (9/125µm), SM	23 dBm	-2 to +3 dBm	-25 dBm	
EX-1250TBP-CB8L-D (1490nm)	Single LC	TX:1490 / RX:1570	80KM (9/125µm), SM	24 dBm	-1 to +4 dBm	-25 dBm	
EX-1250TBP-CB8L-D (1570nm)	Single LC	TX:1570 / RX:1490	80KM (9/125µm), SM	24 dBm	-1 to +4 dBm	-25 dBm	

Specifications of Hardened SFP Fiber Transceiver

Model Number	Product Information						
	Connector Type	Wavelength (nm)	Distance	Link Budget	Optical Output Power	Sensitivity	Case Operating Temperature
EX-0155NSP-MB2L-A	Duplex LC	1310	2Km	13 dBm	-19 to -14 dBm	-32 dBm	-40°C to 85°C (-40°F to 185°F)
EX-0155TSP-MB5L-A	Duplex LC	1310	15Km	19 dBm	-15 to -8 dBm	-34 dBm	
EX-0155TSP-MB6L-A	Duplex LC	1310	40Km	30 dBm	-5 to 0 dBm	-35 dBm	
EX38-A3S-TI-N-B3	Single LC	TX:1310 / RX:1550	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX48-A3S-TI-N-B5	Single LC	TX:1550 / RX:1310	2Km	18 dBm	-10 to 0 dBm	-28 dBm	
EX-0155TBP-MB5L-A	Single LC	TX:1310 / RX:1550	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-LB5L-A	Single LC	TX:1550 / RX:1310	20Km	18 dBm	-14 to -8 dBm	-32 dBm	
EX-0155TBP-MB6L-A	Single LC	TX:1310 / RX:1550	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-0155TBP-KB6L-A	Single LC	TX:1550 / RX:1310	40Km	26 dBm	-8 to -3 dBm	-34 dBm	
EX-1250NSP-SB1L-A	Duplex LC	850	275M (62.5/125 μm)/ 550M (50/125 μm), MM	7.5 dBm	-9.5 to -4 dBm	-17 dBm	
EX-1250TSP-MB2L-A	Duplex LC	1310	2KM (62.5/125 μm), MM	13.5 dBm	-9.5 to -3 dBm	-23 dBm	
EX-1250TSP-MB4L-A	Duplex LC	1310	10KM (9/125μm), SM	11.5 dBm	-9.5 to -3 dBm	-21 dBm	
EX-1250TSP-MB5L-A	Duplex LC	1310	20KM (9/125μm), SM	15 dBm	-9 to -3 dBm	-24 dBm	
EX-1250TSP-NB6L-A	Duplex LC	1310	40KM (9/125μm), SM	20 dBm	-3 to +2 dBm	-23 dBm	
EX-1250TSP-KB8L-A	Duplex LC	1550	70KM (9/125μm), SM	23 dBm	0 to +5 dBm	-23 dBm	
EX-1250TBP-MB1L-A	Single LC	TX:1310 / RX:1550	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-LB1L-A	Single LC	TX:1550 / RX:1310	550M (62.5/125 μm), MM	7 dBm	-10 to -4 dBm	-17 dBm	
EX-1250TBP-MB4L-A	Single LC	TX:1310 / RX:1550	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-KB4L-A	Single LC	TX:1550 / RX:1310	10KM (9/125μm), SM	12 dBm	-9 to -3 dBm	-21 dBm	
EX-1250TBP-MB5L-A	Single LC	TX:1310 / RX:1550	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	
EX-1250TBP-KB5L-A	Single LC	TX:1550 / RX:1310	20KM (9/125μm), SM	15 dBm	-8 to -3 dBm	-23 dBm	