

Specification of Transceiver Series

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1G SFP Copper RJ-45 Transceiver



1G SFP Copper RJ

Features

- Compliant with IEEE802.3-2002 and 802.3ab
- Compliant with SFP MSA
- Hot Pluggable
- Auto-detect MDI/MDI-X
- Compatible with 1000BASE-X and 1000BASE-T auto-negotiation
- RJ-45 connector
- Single +3.3V power supply
- Link length up to 100m with four-pair Cat.5 UTP cable
- RoHS Compliant

Ordering Information

Date Rate	Form Factor	Connector	Cable Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
1G	SFP	Copper RJ45	Cat.5	100m	NA	NA	NA	0~70°C	Copper RJ45	YTM-24-NN1Cx
1G	SFP	Copper RJ45	Cat.5	100m	NA	NA	NA	-40~85°C	Copper RJ45	YTM-24-NN1Sx

1.25G SFP Dual LC Transceiver



1.25G SFP Dual LC 850nm

1.25G SFP Dual LC 1310nm

1.25G SFP Dual LC 1550nm

Features

- Compliant with IEEE802.3z Gigabit Ethernet
- Compliant with Fiber Channel 100-SM-LC-L
- Compliant with INF-8074i SFP MSA
- Hot Pluggable
- 850nm/1310nm/1550nm laser transmitter
- Duplex LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8472
- Single +3.3V power supply
- Link distance 550m~120km over MM/SM fiber
- RoHS Compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
1.25G	SFP	Dual LC	MMF	550m	850nm	-9.0~-3.0 dBm	≤ -18.0 dBm	0~70°C	SX	YTM-31-1M4Cx
1.25G	SFP	Dual LC	SMF	20km	1310nm	-8.0~-3.0 dBm	≤ -24.0 dBm	0~70°C	LX	YTM-31-2S8Cx
1.25G	SFP	Dual LC	SMF	40km	1310nm	-2.0~+3.0 dBm	≤ -24.0 dBm	0~70°C	LHX	YTM-31-2S9Cx
1.25G	SFP	Dual LC	SMF	80km	1550nm	0.0~+5.0 dBm	≤ -24.0 dBm	0~70°C	ZX	YTM-31-3SBCx
1.25G	SFP	Dual LC	SMF	120km	1550nm	0.0~+5.0 dBm	≤ -32.0 dBm	0~70°C	EZX	YTM-31-3SDCx
1.25G	SFP	Dual LC	MMF	550m	850nm	-9.0~-3.0 dBm	≤ -18.0 dBm	-40~85°C	SX	YTM-31-1M4Sx
1.25G	SFP	Dual LC	SMF	20km	1310nm	-8.0~-3.0 dBm	≤ -24.0 dBm	-40~85°C	LX	YTM-31-2S8Sx
1.25G	SFP	Dual LC	SMF	40km	1310nm	-2.0~+3.0 dBm	≤ -24.0 dBm	-40~85°C	LHX	YTM-31-2S9Sx
1.25G	SFP	Dual LC	SMF	80km	1550nm	0.0~+5.0 dBm	≤ -24.0 dBm	-40~85°C	ZX	YTM-31-3SBSx
1.25G	SFP	Dual LC	SMF	120km	1550nm	0.0~+5.0 dBm	≤ -32.0 dBm	-40~85°C	EZX	YTM-31-3SDSx

1.25G SFP BIDI LC Transceiver



1.25G SFP Bidi LC 1310nm



1.25G SFP Bidi LC 1550nm

Features

- Compliant with IEEE802.3ah 1000BASE-BX
- Compliant with Fiber Channel 100-SM-LC-L
- Compliant with INF-8074i SFP MSA
- Hot Pluggable
- 1310nm/1550nm laser transmitter
- Bidi LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8472
- Single +3.3V power supply
- Link distance 20km~40km over SM fiber
- RoHS Compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
1.25G	SFP	Bidi LC	SMF	20km	Tx1310nm RX1550nm	-8.0~-2.0 dBm	≤ -23.0 dBm	0~70°C	BX-20U	YTM-32-4S8Cx
1.25G	SFP	Bidi LC	SMF	20km	Tx1550nm RX1310nm	-8.0~-2.0 dBm	≤ -23.0 dBm	0~70°C	BX-20D	YTM-32-5S8Cx
1.25G	SFP	Bidi LC	SMF	40km	Tx1310nm RX1550nm	-3.0~+2.0 dBm	≤ -23.0 dBm	0~70°C	BX-40U	YTM-32-4S9Cx
1.25G	SFP	Bidi LC	SMF	40km	Tx1550nm RX1310nm	-3.0~+2.0 dBm	≤ -23.0 dBm	0~70°C	BX-40D	YTM-32-5S9Cx
1.25G	SFP	Bidi LC	SMF	20km	Tx1310nm RX1550nm	-8.0~-2.0 dBm	≤ -23.0 dBm	-40~85°C	BX-20U	YTM-32-4S8Sx
1.25G	SFP	Bidi LC	SMF	20km	Tx1550nm RX1310nm	-8.0~-2.0 dBm	≤ -23.0 dBm	-40~85°C	BX-20D	YTM-32-5S8Sx
1.25G	SFP	Bidi LC	SMF	40km	Tx1310nm RX1550nm	-3.0~+2.0 dBm	≤ -23.0 dBm	-40~85°C	BX-40U	YTM-32-4S9Sx
1.25G	SFP	Bidi LC	SMF	40km	Tx1550nm RX1310nm	-3.0~+2.0 dBm	≤ -23.0 dBm	-40~85°C	BX-40D	YTM-32-5S9Sx

10G SFP+ Copper RJ-45 Transceiver



10G SFP+ Copper RJ

Features

- Compliant with IEEE 802.3an, 802.3ab and 802.3z
- Compliant with SFF-8431, SFF-8432 SFP+ MSA
- Support 10GBASE-T/ 5GBASE-T/ 2.5GBASE-T/1000BASE-T/ 100BASE-TX
- Hot Pluggable
- Auto-negotiates with other 10GBASE-T PHYs
- Auto-detect MDI/MDI-X
- RJ-45 connector
- Single +3.3V power supply
- 10G link length up to 30m
- RoHS Compliant

Ordering Information

Date Rate	Form Factor	Connector	Cable Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
10G	SFP+	Copper RJ45	Cat.6/7	30m	NA	NA	NA	0~70°C	Copper RJ45	YTM-47-NN1Cx
10G	SFP+	Copper RJ45	Cat.6/7	30m	NA	NA	NA	-40~85°C	Copper RJ45	YTM-47-NN1Sx

10G SFP+ Dual LC Transceiver



10G SFP+ Dual LC SR



10G SFP+ Dual LC LR



10G SFP+ Dual LC ER



10G SFP+ Dual LC ZR & EZR

Features

- Compliant with IEEE802.3ae 10GBASE SR/LR/ER/ZR
- Compliant with SFF 8431, SFF 8432 SFP+ MSA
- 850nm/1310nm/1550nm laser transmitter
- 2 wire interface for management and diagnostic monitor compliant with SFF 8472
- Single +3.3V power supply
- Link distance 300m~100km over MM/SM fiber
- RoHS Compliant

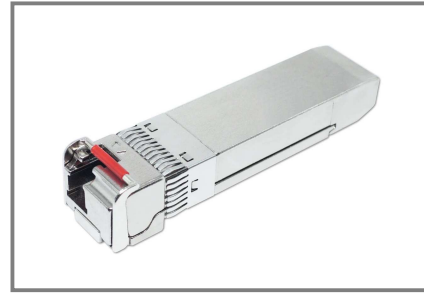
Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
10G	SFP+	Dual LC	MMF	300m	850nm	-6.5~-1.0 dBm	≤ -10.0 dBm	0~70°C	SR	YTM-45-1M3Cx
10G	SFP+	Dual LC	SMF	10km	1310nm	-8.2~+0.5 dBm	≤ -14.5 dBm	0~70°C	LR	YTM-45-2S7Cx
10G	SFP+	Dual LC	SMF	40km	1310nm	0.0~+4.0 dBm	≤ -16.0 dBm	0~70°C	ER	YTM-45-2S9Cx
10G	SFP+	Dual LC	SMF	40km	1550nm	-4.7~+4.0 dBm	≤ -16.0 dBm	0~70°C	ER	YTM-45-3S9Cx
10G	SFP+	Dual LC	SMF	80km	1550nm	0.0~+4.0 dBm	≤ -23.0 dBm	0~70°C	ZR	YTM-45-3SBCx
10G	SFP+	Dual LC	SMF	100km	1550nm	+1.0~+4.0 dBm	≤ -25.0 dBm	0~70°C	EZR	YTM-45-3SCCx
10G	SFP+	Dual LC	MMF	300m	850nm	-6.5~-1.0 dBm	≤ -10.0 dBm	-40~85°C	SR	YTM-45-1M3Sx
10G	SFP+	Dual LC	SMF	10km	1310nm	-8.2~+0.5 dBm	≤ -14.5 dBm	-40~85°C	LR	YTM-45-2S7Sx
10G	SFP+	Dual LC	SMF	40km	1310nm	0.0~+4.0 dBm	≤ -16.0 dBm	-40~85°C	ER	YTM-45-2S9Sx
10G	SFP+	Dual LC	SMF	40km	1550nm	-4.7~+4.0 dBm	≤ -16.0 dBm	-40~85°C	ER	YTM-45-3S9Sx
10G	SFP+	Dual LC	SMF	80km	1550nm	0.0~+4.0 dBm	≤ -23.0 dBm	-40~85°C	ZR	YTM-45-3SBSx
10G	SFP+	Dual LC	SMF	100km	1550nm	+1.0~+4.0 dBm	≤ -25.0 dBm	-40~85°C	EZR	YTM-45-3SCSx

10G SFP+ BIDI LC Transceiver



10G SFP+ Bidi LC 1270nm



10G SFP+ Bidi LC 1330nm

Features

- Compatible with IEEE802.3ae 10GBASE-BX(BR)
- Compliant with SFF-8431, SFF-8432 SFP+ MSA
- Hot Pluggable
- 1270nm / 1330nm DFB laser transmitter
- Bidi LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8472
- Single +3.3V power supply
- Link distance 20km~40km over SM fiber
- RoHS Compliant

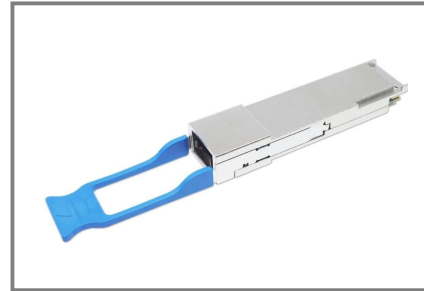
Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
10G	SFP+	Bidi LC	SMF	20km	Tx1270nm Rx1330nm	-6.0~0.0 dBm	≤ -14.0 dBm	0~70°C	BX-20U	YTM-46-AS8Cx
10G	SFP+	Bidi LC	SMF	20km	Tx1330nm Rx1270nm	-6.0~0.0 dBm	≤ -14.0 dBm	0~70°C	BX-20D	YTM-46-BS8Cx
10G	SFP+	Bidi LC	SMF	40km	Tx1270nm Rx1330nm	-2.0~+3.0 dBm	≤ -14.5 dBm	0~70°C	BX-40U	YTM-46-AS9Cx
10G	SFP+	Bidi LC	SMF	40km	Tx1330nm Rx1270nm	-2.0~+3.0 dBm	≤ -14.5 dBm	0~70°C	BX-40D	YTM-46-BS9Cx
10G	SFP+	Bidi LC	SMF	20km	Tx1270nm Rx1330nm	-6.0~0.0 dBm	≤ -14.0 dBm	-40~85°C	BX-20U	YTM-46-AS8Sx
10G	SFP+	Bidi LC	SMF	20km	Tx1330nm Rx1270nm	-6.0~0.0 dBm	≤ -14.0 dBm	-40~85°C	BX-20D	YTM-46-BS8Sx
10G	SFP+	Bidi LC	SMF	40km	Tx1270nm Rx1330nm	-2.0~+3.0 dBm	≤ -14.5 dBm	-40~85°C	BX-40U	YTM-46-AS9Sx
10G	SFP+	Bidi LC	SMF	40km	Tx1330nm Rx1270nm	-2.0~+3.0 dBm	≤ -14.5 dBm	-40~85°C	BX-40D	YTM-46-BS9Sx

40G QSFP+ MPO Transceiver



40G QSFP+ MPO SR4



40G QSFP+ MPO PSM4-LR

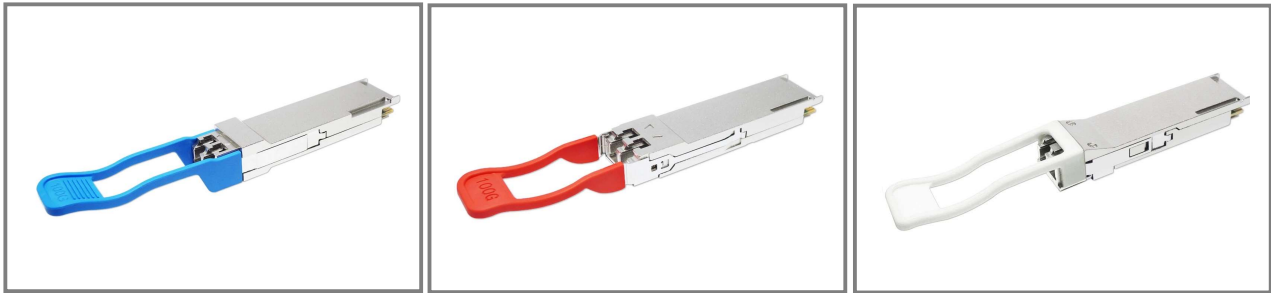
Features

- Compliant with IEEE802.3ba 40GBASE-SR4/40GBASE-LR4
- Compliant with SFF-8436 QSFP+ MSA
- Support InfiniBand QDR
- 4 independent full-duplex channels
- Up to 11.2Gbps data rate per channel
- Hot Pluggable
- 850nm/1310nm laser transmitter
- MPO-12 receptacle connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8436, SFF-8636
- Single 3.3V power supply
- Link distance 100m over MM OM3 fiber/10km over SM fiber
- RoHS Compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
40G	QSFP+	MPO	MMF	150m	850nm	-6.0~+2.4 dBm	≤ -10.2 dBm	0~70°C	SR4	YTM-6C-1M2Cx
40G	QSFP+	MPO	SMF	10km	1310nm	-5.5~+2.3 dBm	≤ -12.6 dBm	0~70°C	PSM4-LR	YTM-6C-2S7Cx

40G QSFP+ Dual LC Transceiver



40G QSFP+ Dual LC LR4

100G QSFP+ Dual LC ER4

40G QSFP+ Dual LC ZR4

Features

- Compatible with IEEE802.3xx 40GBASE-LR4/ER4/ZR4
- Compliant to SFF-8436 QSFP+ MSA
- Supports QDR / DDR InfiniBand
- 4CH CWDM or LWDM MUX / DEMUX design
- Data Rate up to 11.2Gbps per Lane
- Hot Pluggable
- CWDM DFB/O-Band LWDM DFB transmitter
- Duplex LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8436, SFF-8636
- Single 3.3V power supply
- Link distance 10km~80km over SM fiber
- RoHS compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
40G	QSFP+	Dual LC	SMF	10km	CWDM	-7.0~+2.3 dBm	≤ -11.5 dBm	0~70°C	LR4	YTM-6D-HS7Cx
40G	QSFP+	Dual LC	SMF	40km	CWDM	0.0~+4.5 dBm	≤ -21.0 dBm	0~70°C	ER4	YTM-6D-HS9Cx
40G	QSFP+	Dual LC	SMF	80km	LAN WDM	+1.0~+6.0 dBm	≤ -25.0 dBm	0~70°C	ZR4	YTM-6D-JSBCx

100G QSFP28 MPO Transceiver



100G QSFP28 MPO SR4

Features

- Compliant with IEEE802.3bm 100GBASE-SR4t
- Compliant with SFF-8665 QSFP28 MSA
- Compliant with IEEE 802.3bm CAUI-4 Interface
- 4 independent full-duplex channels
- Data Rate 25.78125Gbps per Lane
- Built in Tx CDR and Rx CDR
- Hot Pluggable QSFP28 footprint
- 4CH 850nm VCSEL array transmitter
- 4CH PIN array receiver
- MPO-12 receptacle connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8636
- Single 3.3V power supply
- Link distance 100m over MM OM4 fiber
- RoHS compliant

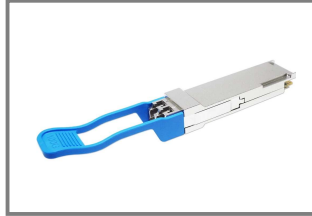
Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
100G	QSFP28	MPO	MMF	100m	850nm	-8.4~+2.4 dBm	≤ -10.3 dBm	0~70°C	SR4	YTM-8E-1M1Cx

100G QSFP28 Dual LC Transceiver



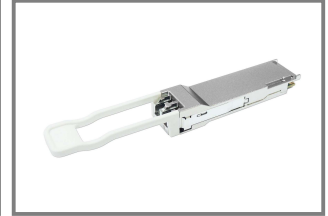
100G QSFP28 Dual LC CWDM4



100G QSFP28 Dual LC LR4



100G QSFP28 Dual LC ER4



100G QSFP28 Dual LC ZR4

Features

- Compliant with IEEE 802.3ba 100GBASE-CWDM4/LR4/ER4/ZR4
- Compliant with SFF-8665 QSFP28 MSA
- Compliant with IEEE 802.3bm CAUI-4 Interface
- 4CH CWDM/LWDM MUX / DEMUX design
- Data Rate 25.78125Gbps per Lane
- Built in quad Tx CDR and Rx CDR
- Hot Pluggable QSFP28 footprint
- CWDM/O-Band LWDM DFB laser transmitter
- Duplex LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8636
- Single 3.3V power supply
- Link distance 2km~80km over SM fiber
- RoHS compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
100G	QSFP28	Dual LC	SMF	2km	CWDM	-6.5~+2.5 dBm	≤ -10.0 dBm	0~70°C	CWDM4	YTM-8F-HS5Cx
100G	QSFP28	Dual LC	SMF	10km	LAN WDM	-4.3~+4.5 dBm	≤ -8.6 dBm	0~70°C	LR4	YTM-8F-JS7Cx
100G	QSFP28	Dual LC	SMF	40km	LAN WDM	-2.9~+4.5 dBm	≤ -18.5 dBm	0~70°C	ER4	YTM-8F-JS9Cx
100G	QSFP28	Dual LC	SMF	80km	LAN WDM	+2.0~+6.5 dBm	≤ -28.0 dBm	0~70°C	ZR4	YTM-8F-JSBCx

100G QSFP28 BIDI LC Transceiver



100G QSFP28 Bidi LC BX-U



100G QSFP28 Bidi LC BX-D

Features

- Compliant with SFF-8665 QSFP28 MSA
- Compliant with IEEE 802.3bm CAUI-4 Interface
- Signal Conversion between 53.125GBd PAM4 optical signal and 25.78125Gbps NRZ electrical signal with DSP Gear Box
- Built in Tx CDR and Rx CDR
- Inbuild KP4 FEC
- Hot Pluggable QSFP28 footprint
- 1271nm / 1291nm / 1331nm / 1311nm / 1304nm / 1309nm laser transmitter
- Simplex LC connector
- 2-wire interface for management and diagnostic monitor compliant with SFF-8636
- Single 3.3V power supply
- Link distance 10km~40km over SM fiber with FEC
- RoHS compliant

Ordering Information

Date Rate	Form Factor	Connector	Fiber Type	Distance	Wavelength	TX Power	RX Sensitivity	Temperature	Remark	Part Number
100G	QSFP28	Bidi LC	SMF	10km	Tx1271nm RX1331nm	-1.4~+4.5 dBm	≤ -7.7 dBm	0~70°C	BX-10U	YTM-8G-AS7Cx
100G	QSFP28	Bidi LC	SMF	10km	Tx1331nm RX1271nm	-1.4~+4.5 dBm	≤ -7.7 dBm	0~70°C	BX-10D	YTM-8G-BS7Cx
100G	QSFP28	Bidi LC	SMF	20km	Tx1291nm RX1311nm	-0.2~+6.6 dBm	≤ -10.0 dBm	0~70°C	BX-20U	YTM-8F-GS9Cx
100G	QSFP28	Bidi LC	SMF	20km	Tx1311nm RX1291nm	-0.2~+6.6 dBm	≤ -10.0 dBm	0~70°C	BX-20D	YTM-8F-MS9Cx
100G	QSFP28	Bidi LC	SMF	40km	Tx1304nm RX1309nm	+1.5~+7.1 dBm	≤ -16.2 dBm	0~70°C	BX-40U	YTM-8F-ES9Cx
100G	QSFP28	Bidi LC	SMF	40km	Tx1309nm RX1304nm	+1.5~+7.1 dBm	≤ -16.2 dBm	0~70°C	BX-40D	YTM-8F-FS9Cx