InterOptic
By Advantage Optics

◆ **CISCO-COMPATIBLE DATA SHEET:**

10G XFP PRODUCT FAMILY

DESCRIPTION

The 10GBASE XFP modules allow a wide variety of 10 Gigabit Ethernet/OC-192/STM-64 connectivity options for data center, enterprise, and service provider transport applications. InterOptic 10G XFP modules are supported on a comprehensive suite of switches and routers.

FEATURES & BENEFITS

◆ 10GBASE Ethernet and OC-192/STM-64 data rates supported

◆ "Pay as you Populate" model lowers initial costs

◆ Hot-swappable 10G XFP modules allow for quick additions/ changes into an available 10G XFP port

◆ Digital optical monitoring capability for strong diagnostic capabilities as supported by the OEM

◆ Optical interoperability allows for 10GBASE XENPAK, 10GBASE X2, and 10GBASE SFP+ optical interfaces on the same link

XFP-10G-MM-SR

The 10GBASE-SR XFP module supports a link length of up to 26m on standard Fiber Distributed Data Interface (FDDI)-grade multimode fiber (MMF). A link length of up to 300m is possible using 2000MHz*km MMF (OM3). Using 4700MHz*km MMF (OM4), up to 400m link lengths are possible.

XFP-10GLR-OC192SR, XFP10GLR-192SR-L, XFP10GLR192SR-RGD

The 10GBASE-LR, 10GBASE-LW, and OC-192 SR-1 multi-rate XFP module supports a link length of up to 10km on standard single-mode fiber (SMF, G.652).

XFP-10GER-OC192IR, XFP-10GER-192IR+, XFP10GER192IR-RGD

The 10GBASE-ER, 10GBASE-EW, and OC-192 IR-2 multi-rate XFP module supports a link length of up to 40km on standard single-mode fiber (SMF, G.652).

XFP-10GZR-OC192LR, XFP10GZR192LR-RGD

The 10GBASE-ZR, 10GBASE-ZW, and OC-192 LR-2 multi-rate XFP module supports a link length of up to 80km on standard single-mode fiber (SMF, G.652). The ZR interface is not specified as part of the 10 Gigabit Ethernet standard and is instead built according to OEM specifications.

ORDERING INFORMATION

XFP-10G-MM-SR	Cisco Compatible 10GBASE-SR XFP Transceiver for MMF
XFP-10GLR-OC192SR	Cisco Compatible 10GBASE-LR, 10GBASE-LW, and OC-192 SR-1 XFP Transceiver for SMF
XFP10GLR-192SR-L	Cisco Compatible 10GBASE-LR, 10GBASE-LW, and OC-192 SR-1 XFP Transceiver for SMF, Low Power
XFP10GLR192SR-RGD	Cisco Compatible 10GBASE-LR, 10GBASE-LW, and OC-192 SR-1 XFP Transceiver for SMF, Industrial Temperature
XFP-10GER-OC192IR	Cisco Compatible 10GBASE-ER, 10GBASE-EW, and OC-192 IR-2 XFP Transceiver for SMF
XFP-10GER-192IR+	Cisco Compatible 10GBASE-ER, 10GBASE-EW, and OC-192 IR-2 XFP Transceiver for SMF
XFP10GER192IR-RGD	Cisco Compatible 10GBASE-ER, 10GBASE-EW, and OC-192 IR-2 XFP Transceiver for SMF, Industrial Temperature
XFP-10GZR-OC192LR	Cisco Compatible 10GBASE-ZR, 10GBASE-ZW, and OC-192 LR-2 XFP Transceiver for SMF
XFP10GZR192LR-RGD	Cisco Compatible 10GBASE-ZR, 10GBASE-ZW, and OC-192 LR-2 XFP Transceiver for SMF, Industrial Temperature

PART NUMBER	CONNECTION TYPE	WAVELENGTH (nm)	CABLE TYPE	CORE SIZE (um)	MODAL BANDWIDTH (MHz*km)	MAXIMUM OPERATING DISTANCE
XFP-10G-MM-SR	LC - Duplex	850	MMF	62.5	160 (FDDI)	26m
				62.5	200 (OM1)	33m
				50	400 (400/400)	66m
				50	500 (OM2)	82m
				50	2000 (OM3)	300m
				50	4700(OM4)	400m
XFP-10GLR-OC192SR XFP10GLR-192SR-L XFP10GLR192SR-RGD	LC - Duplex	1310	SMF	G.652	N/A	10km
XFP-10GER-OC192IR XFP-10GER-192IR+ XFP10GER192IR-RGD	LC - Duplex	1550	SMF	G.652	N/A	40km
XFP-10GZR-OC192LR XFP10GZR192LR-RGD	LC - Duplex	1550	SMF	G.652	N/A	80km

PART NUMBER	PHY TYPE	TX POWER (dBm) Max-Min	RX POWER (dBm) Max - Min	TEMPERATURE RANGE	OPERATING TEMPERATURE
XFP-10G-MM-SR	10GBASE-SR	-1.2 to -7.3	-1.0 to -9.9	COM	0 to 70 °C
XFP-10GLR-OC192SR XFP10GLR-192SR-L	10GBASE-LR 10GBASE-LW and OC-192 SR-1	-3.0 to -1.0 to -6.0 -9.0	0.5 to -14.4	COM	0 to 70 °C
XFP10GLR192SR-RGD	10GBASE-LR 10GBASE-LW and OC-192 SR-1	-1.0 to -6.0	0.5 to -14.4	IND	-40 to 85 °C
XFP-10GER-OC192IR XFP-10GER-192IR+	10GBASE-ER 10GBASE-EW and OC-192 IR-2	2.0 to -1.0	-1.0 to -15.8	COM	0 to 70 °C
XFP10GER192IR-RGD	10GBASE-ER 10GBASE-EW and OC-192 IR-2	2.0 to -1.0	-1.0 to -15.8	IND	-40 to 85 °C
XFP-10GZR-OC192LR	10GBASE-ZR 10GBASE-ZW and OC-192 LR-2	4.0 to 0.0	-7.0 to -24.0	COM	0 to 70 °C
XFP10GZR192LR-RGD	10GBASE-ZR 10GBASE-ZW and OC-192 LR-2	4.0 to 0.0	-7.0 to -24.0	IND	-40 to 85 °C

PHYSICAL DIMENSIONS (HxWxD)
XFP Module: 8.5 x 18.5 x 78.0 mm

POWER REQUIREMENTS (TYPICAL)
XFP Module: 1.5 W
(XFP-10G-MM-SR, XFP10GLR-192SR-L)
XFP Module: 3.5 W

WARRANTY
Standard: 3 Year
Extended: Optional, up to 5 Years

SAFETY
Laser Class 1: 21CFR-1040 LN#50
Laser Class 1: IEC60825-1

STANDARDS COMPLIANCE
IEEE 802.3ae: 10 Gigabit Ethernet
GR-20-CORE: Generic Requirements for Optical Fiber and Optical Fiber Cable
GR-326-CORE: Generic Requirements for Single-mode Optical Connectors and Jumper Assemblies
GR-1435-CORE: Generic Requirements for Multi-Fiber Optical Connectors
XFP Module: MSA INF-8077, MSA SFF-8472 (for DDM/DOM capable transceivers)