



Products Introduction

SFP-QSFP Solutions



Connecting *Idea & Technology*



Copper RJ45 SFP/GBIC

Product Features:

- 100m transmission over unshielded twistedpair (UTP) Category 5 Cable
- Support intelligent auto-negotiation 1000BASE-T operation in host systems
- Hot-pluggable capability
- SFP/GBIC form with compact RJ-45 connector
- With spring latch for high density application
- Very low EMI and excellent ESD protection
- +3.3/5V single power supply
- Low power dissipation
- RoHS compliant

Applications:

- LAN 1000Base-T
- Switch to Switch interface
- Router/Server interface



P/N	Specifications				Connector
	Data Rate	Distance	Package	Media	
MD1AOT-G-S	1000	100M	GBIC	0.1 (UTP-5)	RJ45
MD1AOT-P-S	1000	100M	SFP	0.1 (UTP-5)	RJ45
MD1AOT-P-F	10/100/1000	100M	SFP	0.1 (UTP-5)	RJ45

SFP Transceivers

Product Features

- Data rate 155M/622M/1.25G/2.5G/4.25G
- 850nm/1310nm/1550nm laser diode transmitter
- PIN/APD photodiode receiver
- SFP MSA package with duplex LC connector
- +3.3V single power supply
- Digital Diagnostic Monitor Interface
- Very low EMI and excellent ESD protection
- RoHS compliant products available
- Distance from 100m to 120km
- CWDM/DWDM option

Applications

- SDH/SONET/ATM
- Switch/Router
- SAN/Server
- Other optical transmission systems



Dual fiber SFP

P/N	Specifications				Connector
	Data Rate	Distance	Wavelength	Media	
MD2AOT-303-R02(D)	155Mb/s	2km	1310nm	MM	LC
MD2AOT-303-R20(D)	155Mb/s	20km	1310nm	SM	LC
MD2AOT-303-R40(D)	155Mb/s	40km	1310nm	SM	LC
MD2AOT-303-R80(D)	155Mb/s	80km	1550nm	SM	LC
MD2AOT-824-R005(D)	1.25Gb/s	550m	850nm	MM	LC
MD2AOT-324-R02(D)	1.25Gb/s	2km	1310nm	SM	LC

MD2AOT-324-R20(D)	1.25Gb/s	20km	1310nm	SM	LC
MD2AOT-324-R40(D)	1.25Gb/s	40km	1310nm	SM	LC
MD2AOT-524-R40(D)	1.25Gb/s	40km	1550nm	SM	LC
MD2AOT-524-R80(D)	1.25Gb/s	80km	1550nm	SM	LC
MD2AOT-524-R120D	1.25Gb/s	120km	1550nm	SM	LC
MD2AOT-848-R003(D)	2.5Gb/s	300m	850nm	MM	LC
MD2AOT-348-R02(D)	2.5Gb/s	2km	1310nm	SM	LC
MD2AOT-348-R15(D)	2.5Gb/s	15km	1310nm	SM	LC
MD2AOT-348-R40(D)	2.5Gb/s	40km	1310nm	SM	LC
MD2AOT-548-R80(D)	2.5Gb/s	80km	1550nm	SM	LC
MD2AOT-82F-R003(D)	2.125Gb/s	300m	850nm	MM	LC
MD2AOT-32F-R02(D)	2.125Gb/s	2km	1310nm	SM	LC
MD2AOT-32F-R15(D)	2.125Gb/s	15km	1310nm	SM	LC
MD2AOT-32F-R40D	2.125Gb/s	40km	1310nm	SM	LC
MD2AOT-52F-R80D	2.125Gb/s	80km	1550nm	SM	LC
MD2AOT-84F-R003D	4.25Gb/s	300m	850nm	MM	LC
MD2AOT--34F-R10D	4.25Gb/s	10km	1310nm	SM	LC
CWDM SFP					
MD2AOTC-XX24-R40(D)	1.25Gb/s	40km	1470-1610	SM	LC
MD2AOTC-XX24-R80(D)	1.25Gb/s	80km	1470-1610	SM	LC

MD2AOTC-XX24-R120D	1.25Gb/s	120km	1470-1610	SM	LC
MD2AOTC-XX24-R150D	1.25Gb/s	150km	1470-1610	SM	LC
MD2AOTC-XX48-R40(D)	2.5Gb/s	40km	1470-1610	SM	LC
MD2AOTC-XX48-R80D	2.5Gb/s	80km	1470-1610	SM	LC
DWDM SFP					
MD2AOTD-XX24-R40	1.25Gb/s	40km	1530.33-1561.42	SM	LC
MD2AOTD-XX24-R80	1.25Gb/s	80km	1530.33-1561.42	SM	LC
MD2AOTD-XX24-R120	1.25Gb/s	120km	1530.33-1561.42	SM	LC
MD2AOTD-XX48-R80	2.5Gb/s	80km	1530.33-1561.42	SM	LC
MD2AOTD-XX48-R120	2.5Gb/s	120km	1530.33-1561.42	SM	LC

BIDI SFP (WDM SFP)

P/N	Specifications				Connector
	Data Rate	Distance	Wavelength	Media	
MD2AOTB-3503S(L)-R20(D)	155Mb/s	20km	Tx1310nm / Rx1550nm	SM	LC/SC
MD2AOTB-5303S(L)-R20(D)			Tx1550nm / Rx1310nm	SM	LC/SC
MD2AOTB-3524S(L)-R03(D)	1.25Gb/s	3km	Tx1310nm / Rx1550nm	SM	LC/SC
MD2AOTB-5324S(L)-R03(D)			Tx1550nm / Rx1310nm	SM	LC/SC
MD2AOTB-3524S(L)-R20(D)	1.25Gb/s	20km	Tx1310nm / Rx1550nm	SM	LC/SC
MD2AOTB-5324S(L)-R20(D)			Tx1550nm / Rx1310nm	SM	LC/SC

GPON/EPON (GEPON) optical module

Features:

Integrated Single fiber bi-directional optical subassembly
 SFP or SFF form factor, Simple SC Connector
 0 to 70°C operating ambient temperature
 +3.3V single power supply
 Low power consumption
 Excellent EMI and EMC characteristics
 Class 1 Laser eye safety standard
 Excellent EMI and EMC characteristics
 ESD protection function
 RoHS-5/6 compliant (lead exemption)

Applications:

Gigabit Ethernet Passive Optical Networks (EPON)
 Gigabit-capable Passive Optical Networks (GPON)



P/N	Specifications				Remarks
	Data Rate	Distance	Wavelength	Media	
EPON					
MD3EPON-ONT-SFF-C	TX 1.25G/RX 1.25G	20km	Tx1310nm / Rx1490nm	SM	SFF
MD3EPON-ONT-SFP-C	TX 1.25G/RX 1.25G	20km	Tx1310nm / Rx1490nm	SM	SFP
MD3EPON-OLT-1	1.244Gbit/s downstream 1.244 Gbit/s upstream	20km	Tx1490nm (DFB) / Rx1310nm (APD)	SM	≤4dBm
MD3EPON-OLT-2	1.244Gbit/s downstream 1.244 Gbit/s upstream	20km	Tx1490nm (DFB) / Rx1310nm (APD)	SM	≥5dBm
GPON					
MD3GPON-ONT-SFF-C	TX 1.25G/RX 2.5G	20km	Tx1310nm / Rx1490nm	SM	CT

MD3GPON-ONT-SFF-I	TX 1.25G/RX 2.5G	20km	Tx1310nm / Rx1490nm	SM	IT
MD3GPON-ONT-SFP-I	TX 1.25G/RX 2.5G	20km	Tx1310nm / Rx1490nm	SM	IT
MD3GPON-OLT-B	2.488 Gbit/s downstream 1.244 Gbit/s upstream	20km	Tx1490nm (DFB) / Rx1310nm (APD)	SM	B+
MD3GPON-OLT-C	2.488 Gbit/s downstream 1.244 Gbit/s upstream	20km	Tx1490nm (DFB) / Rx1310nm (APD)	SM	C+

10G SFP+ & 25G SFP28

Features

Laser Class 1
Electrical interface compliant to SFP+ MSA
I2C Management Interface
Low Power Consumption
Compliant to SONET OC192/SDH STM64 and 802.3ae
Hardware/Software Rate Select Function for 8.5G and 9.95~11.3G Data Rate
Lower Power Consumption
Compliant to SFP+ Electrical MSA SFF-8431
RoHS 6/6 Compliant

Applications

Data Center
Switch and Router
Wireless Repeater
SONET (OC-192)/SDH (STM64) Line Card
4G LTE Wireless Backhauls
High Speed Point-to-Point Links

P/N	Specifications						Connector
	Data Rate	Distance	Wavelength	FP	PD	Media	
MD4AO-8192-SR	10G/ps	300M	850	VSCEL	PIN	MM	LC
MD4AO-3192-LR02	10G/ps	2KM	1310	FP	PIN	SM	LC
MD4AO-3192-LR	10G/ps	10KM	1310	DFB	PIN	SM	LC
MD4AO-3192-LRM	10G/ps	220M	1310	DFB	PIN	MM	LC
MD4AO-3192-ER	10G/ps	40KM	1310	DFB	PIN	SM	LC



MD4AO-3192-ER	10G/ps	40KM	1550	DFB	PIN	SM	LC
MD4AO-5192-ZR	10G/ps	80KM	1550	DFB	APD	SM	LC
MD4AO-5192-EZR100	10G/ps	100KM	1550	DFB	APD	SM	LC
MD4AO-5192-EZR120	10G/ps	120KM	1550	DFB	APD	SM	LC
MD4AO-CXXXX-R20	10G/ps	20KM	CWDM XXXXnm	DFB	PIN	SM	LC
MD4AO-CXXXX-R40	10G/ps	40KM	CWDM XXXXnm	DFB	PIN	SM	LC
MD4AO-CXXXX-R80	10G/ps	80KM	CWDM XXXXnm	DFB	APD	SM	LC
MD4AO-DXX-R40	10G/ps	40KM	DWDM CHXX	DFB	PIN	SM	LC
MD4AO-DXX-R80	10G/ps	80KM	DWDM CHXX	DFB	APD	SM	LC
MD4AO-DTXX-R80	10G/ps	80KM	Tunable DWDM	DFB	APD	SM	LC
BIDI (WDM) SFP+							
MD4AO-WDM13-R20	10G/ps	20KM	1330	DFB	PIN	SM	LC
MD4AO-WDM12-R20	10G/ps	20KM	1270	DFB	PIN	SM	LC
MD4AO-WDM13-R40	10G/ps	40KM	1330	DFB	PIN	SM	LC
MD4AO-WDM12-R40	10G/ps	40KM	1270	DFB	PIN	SM	LC
MD4AO-WDM13-R60	10G/ps	60KM	1330	DFB	PIN	SM	LC
MD4AO-WDM12-R60	10G/ps	60KM	1270	DFB	PIN	SM	LC
MD4AO-WDM13-R70	10G/ps	70KM	1330	DFB	PIN	SM	LC

MD4AO-WDM12-R70	10G/ps	70KM	1270	DFB	PIN	SM	LC
MD4AO-WDM14-R80	10G/ps	80KM	1490	DFB	PIN	SM	LC
MD4AO-WDM15-R80	10G/ps	80KM	1550	DFB	PIN	SM	LC
6G LTE SFP							
MD4AO-36G-R02D	6.25G/ps	2km	1310	DFB	PIN	SM	LC
MD4AO-36G-R10D	6.25G/ps	10km	1310	DFB	PIN	SM	LC
10G LTE SFP (Industrial temperature)							
MD4AO-3192-LRI	10G/ps	10km	1310	DFB	PIN	SM	LC
10G SFP+ with CDR							
MD4AO-3192-LRS	10G/ps	10km	1310	DFB	PIN	SM	LC
8G FC SFP							
MD4AO-88F-SW	8.25G/ps	300m	850	VSCEL	PIN	MM	LC
MD4AO-38F-LW	8.25G/ps	10km	1310	DFB	PIN	SM	LC
16G FC SFP							
MD4AO-816F-SW	16G/ps	300m	850	VSCEL	PIN	MM	LC
MD4AO-316F-LW	16G/ps	10km	1310	DFB	PIN	SM	LC
MD4AO-CXX16F-R40D	16G/ps	40KM	CWDM XXXXnm	DFB	PIN	SM	LC
MD4AO-DXX16F-R40D	16G/ps	40KM	DWDM CHXX	DFB	PIN	SM	LC

25G SFP+							
MD4AOPP-825G-SR	25G/ps	300m	850	VSCEL	PIN	MM	LC
MD4AOPP-325G-LR	25G/ps	10km	1310	DFB	PIN	SM	LC

10G XFP

Features

Support 9.95Gb/s to 11.3Gb/s transmission
 Client side and Line side loopback functions
 Support 8.5G Fiber Channel Rate
 XFP MSA compliant form factor connector
 XFI electrical interface compliant
 I2C interface for diagnostic monitoring
 RoHS 6 Compliant

Applications

SONET (OC-192) / SDH (STM-64)
 10GBASE-ER (10.3125Gbps)
 10GBASE-EW (9.953Gbps)
 Metro Network Transport
 Inter Data Center Connection

P/N	Specifications						Connector
	Data Rate	Distance	Wavelength	LD	PD	Media	
MD5AOX-8192-SR	10G/ps	300M	850	VSCEL	PIN	MM	LC
MD5AOX-3192-LR	10G/ps	10KM	1310	DFB	PIN	SM	LC
MD5AOX-3192-LRM	10G/ps	220M	1310	DFB	PIN	MM	LC
MD5AOX-5192-ER	10G/ps	40KM	1550	DFB	PIN	SM	LC
MD5AOX-5192-ZR	10G/ps	80KM	1550	DFB	APD	SM	LC
MD5AOX-5192-EZR	10G/ps	100KM	1550	DFB	APD	SM	LC
MD5AOX-5192-EZR120	10G/ps	120KM	1550	DFB	APD	SM	LC



MD5AOX-CXXXX-R20	10G/ps	20KM	CWDM XXXXnm	DFB	PIN	SM	LC
MD5AOX-CXXXX-R40	10G/ps	40KM	CWDM XXXXnm	DFB	PIN	SM	LC
MD5AOX-CXXXX-R80	10G/ps	80KM	CWDM XXXXnm	DFB	APD	SM	LC
MD5AOX-DXX-R40	10G/ps	40KM	DWDM CHXX	DFB	PIN	SM	LC
MD5AOX-DXX-R80	10G/ps	80KM	DWDM CHXX	DFB	APD	SM	LC
MD5AOX-DTXX-R80	10G/ps	80KM	Tunable DWDM	DFB	APD	SM	LC
BIDI (WDM) XFP							
MD5AOX-WDM13-R20	10G/ps	20KM	1330	DFB	PIN	SM	LC
MD5AOX-WDM12-R20	10G/ps	20KM	1270	DFB	PIN	SM	LC
MD5AOX-WDM13-R40	10G/ps	40KM	1330	DFB	PIN	SM	LC
MD5AOX-WDM12-R40	10G/ps	40KM	1270	DFB	PIN	SM	LC
MD5AOX-WDM13-R60	10G/ps	60KM	1330	DFB	PIN	SM	LC
MD5AOX-WDM12-R60	10G/ps	60KM	1270	DFB	PIN	SM	LC
MD5AOX-WDM13-R60	10G/ps	60KM	1330	DFB	PIN	SM	LC
MD5AOX-WDM12-R60	10G/ps	60KM	1270	DFB	PIN	SM	LC
MD5AOX-WDM13-R70	10G/ps	70KM	1330	DFB	PIN	SM	LC
MD5AOX-WDM12-R70	10G/ps	70KM	1270	DFB	PIN	SM	LC
MD5AOX-WDM14-R70	10G/ps	80KM	1490	DFB	PIN	SM	LC
MD5AOX-WDM15-R70	10G/ps	80KM	1570	DFB	PIN	SM	LC

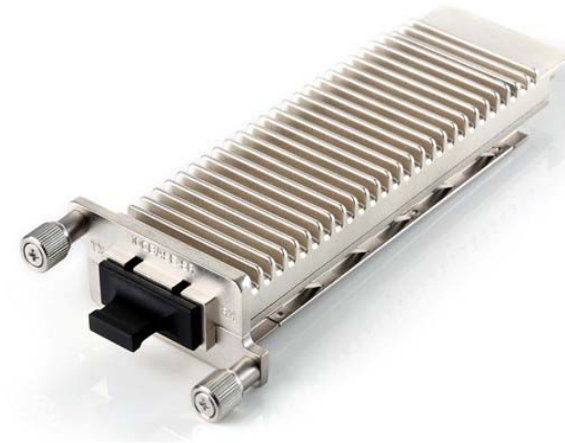
10G XENPAK

Product Features:

- Laser Class 1
- MSA compliant
- VCSEL, DFB or EA-DFB transmitter
- PIN-PD or APD with CDR
- IEEE 802.3ae compliant electrical interface
- Alarms, controls and performance monitoring functions
- Hot Z-Pluggable
- Power supply 5V/3.3V/APS 1.2V
- RoHS Compliant

Applications:

- 10 Gbit/s Ethernet
- OADM
- Metropolitan area network
- Building vertical riser
- Inter and Intra Campus
- Data Centers



P/N	Specifications							Conn.
	Data Rate	Dist.	Wavelength	LD	PD	DDM	Media	
MD6AOK-8192-SR	10.3	300M	850nm	VESCEL	PIN	Y	MM	SC
MD6AOK-3192-LR	10.3	10KM	1310nm	DFB	PIN	Y	SM	SC
MD6AOK-3192-LW	10.3	10KM	1310nm	DFB	PIN	Y	SM	SC
MD6AOK-3192-LRM	10.3	220M	1310nm	DFB	PIN	Y	MM	SC
MD6AOK-5192-ER	10.3	40KM	1550nm	DFB	PIN	Y	SM	SC
MD6AOK-5192-ZR	10.3	80KM	1550nm	DFB	APD	Y	SM	SC
MD6AOK-10GSFP-CRV	XENPAK to SFP+ CONVERTOR							SC

10G X2

Product Features:

- Laser Class 1
- X2 MSA compliant
- VCSEL, DFB or EA-DFB transmitter
- PIN-PD or APD with CDR
- IEEE 802.3ae compliant electrical interface
- Alarms, controls and performance monitoring functions
- Power supply 5V/3.3V/APS 1.2V
- RoHS Compliant

Applications:

- Metropolitan area network
- Building vertical riser
- Inter and Intra Campus
- Data Centers



P/N	Specifications							Connector
	Data Rate	Distance	Wavelength	LD	PD	DDM	Media	
MD7AO2-8192-SR	10.3	300M	850nm	VESCEL	PIN	Y	MM	SC
MD7AO2-3192-LR	10.3	10KM	1310nm	DFB	PIN	Y	SM	SC
MD7AO2-3192-LW	10.3	10KM	1310nm	DFB	PIN	Y	SM	SC
MD7AO2-3192-LRM	10.3	220M	1310nm	DFB	PIN	Y	MM	SC
MD7AO2-5192-ER	10.3	40KM	1550nm	DFB	PIN	Y	SM	SC
MD7AO2-5192-ZR	10.3	80KM	1550nm	DFB	APD	Y	SM	SC
MD7AO2-10GSFP-CRV	X2 to SFP+ CONVERTOR							SC

40G QSFP+ Transceivers

Features

Hot Pluggable
Aggregate Bandwidth of up to 40G
4 Independent Full-duplex Channels
IEEE 802.3ba Compliant
QSFP+ MSA Compliant
Operating Temperature: 0~70°C
Single 3.3V Power Supply

Applications

High-performance Backplane
Computer Cluster Cross-connect
Switch, Router and HBAs
10G/40G Ethernet (XAUI)
Infiniband -SDR, DDR, QDR



P/N	Specifications			
	Data Rate	Distance	Wavelength	Cable Type
MD8QSFP-40G-SR4	40G	100M	850	MMF MPO
MD8QSFP-40G-CSR4	40G	300M	850	MMF MPO
MD8QSFP-40G-SR-BD	40G	300M/500M	4 CWDM	MMF/SMF LC
MD8QSFP-40G-BD-RX	40G	300M/500M	850	MMF/SMF LC
MD8QSFP-40G-IR4-PSM	40G	2KM	1310	SMF MPO
MD8QSFP-40G-LR4-PSM	40G	10KM	1310	SMF MPO
MD8QSFP-40G-IR4	40G	2KM	4 CWDM	SMF LC
MD8QSFP-40G-IR4-PSM	40G	2KM	4 CWDM	SMF MPO
MD8QSFP-40G-LR4	40G	10KM	4 CWDM	SMF LC
MD8QSFP-40G-LR4-PSM	40G	10KM	4 CWDM	SMF MPO
MD8QSFP-40G-ER4	40G	40KM	4 CWDM	SMF

100G CFP & QSFP28 100G

Features:

Hot-pluggable, MSA-compliant CFP, CFP2 and CFP4 form factors
 Supports 39.8 Gb/s to 112 Gb/s aggregate bit rates
 Support 100GE and OTU4
 10 lanes of 10Gb/s high-speed CML electrical interface and compliant with CAUI/OTL4.10
 4 x25Gb/s LAN-WDM transmitter (1295.56,1300.05,1304.58,1309.14nm)
 4 x25Gb/s PIN ROSA
 Up to 10km transmission on SMF
 Duplex LC/PC or SC/PC receptacles
 Compliant with RoHS-6

Application:

WDM/OTN, PTN, Router&Switch
 Security & Monitor Systems

P/N	Specifications			
	Data Rate	Distance	Wavelength	Cable Type
MD9CFP-100G-LR4	100G	10KM	1270 1290 1310 1330	SMF
MD9CFP-100G-LR4-OTU4	100G	10KM	1270 1290 1310 1330	SMF
MD9CFP2-100G-LR4	100G	10KM	1270 1290 1310 1330	SMF
MD9CFP2-100G-LR4-OTU4	100G	10KM	1270 1290 1310 1330	SMF
MD9CFP-100G-ER4	100G	40KM	1270 1290 1310 1330	SMF
MD9CFP2-100G-ER4	100G	40KM	1270 1290 1310 1330	SMF
MD9QSFP28-100G-SR4	100G	100M	850	MMF
MD9QSFP28-100G-LR4	100G	10KM	CWDM	SMF
MD9QSFP28-100G-IR4	100G	2KM	CWDM4	SMF



10G SFP+ Twinax Cable (DAC)

SFP+ Copper Twinax cables are suitable for very short distances and offer a highly cost-effective way to connect within racks and across adjacent racks. SFP+ cables offers a low cost SFP+ solution. SFP+ directly attached twinax cable assemblies supports 10 Gigabit Ethernet, 10 Fibre Channel, and other industry standards.

Applications:

- 10Gigabit Ethernet
- Data center cabling infrastructure
- Storage Area Networks(SAN)
- Network Attached Storage
- Storage Servers
- 1G/2G/4G/8G Fiber Channel



Part Number	Product Description	AWG
10G Passive SFP+ Cable		
MD10DAC-10GSFP-P50CM	10G SFP+ Copper Twinax cable 50CM,passive	24/30
MD10DAC-10GSFP-P1M	10G SFP+ Copper Twinax cable 1 Meter, passive	24/30
MD10DAC-10GSFP-P2M	10G SFP+ Copper Twinax cable 2 Meter, passive	24/30
MD10DAC-10GSFP-P3M	10G SFP+ Copper Twinax cable 3 Meters, passive	24/30
MD10DAC-10GSFP-P4M	10G SFP+ Copper Twinax cable 4 Meters, passive	24/30

MD10DAC-10GSFP-P5M	10G SFP+ Copper Twinax cable 5 Meters, passive	24/30
MD10DAC-10GSFP-P6M	10G SFP+ Copper Twinax cable 6 Meters, passive	24
MD10DAC-10GSFP-P7M	10G SFP+ Copper Twinax cable 7 Meters, passive	24
MD10DAC-10GSFP-P8M	10G SFP+ Copper Twinax cable 8 Meters, passive	24
MD10DAC-10GSFP-P9M	10G SFP+ Copper Twinax cable 9 Meters, passive	24
MD10DAC-10GSFP-P10M	10G SFP+ Copper Twinax cable 10 Meters, passive	24
10G Active SFP+ Cable		
MD10DAC-10GSFP-A1M	10G SFP+ Copper Twinax cable 1 Meters, active	30
MD10DAC-10GSFP-A3M	10G SFP+ Copper Twinax cable 3 Meters, active	30
MD10DAC-10GSFP-A5M	10G SFP+ Copper Twinax cable 5 Meters, active	30
MD10DAC-10GSFP-A7M	10G SFP+ Copper Twinax cable 7 Meters, active	30
MD10DAC-10GSFP-A10M	10G SFP+ Copper Twinax cable 10 Meters, active	28
MD10DAC-10GSFP-A12M	10G SFP+ Copper Twinax cable 12 Meters, active	24
MD10DAC-10GSFP-A15M	10G SFP+ Copper Twinax cable 15 Meters, active	24

10G SFP+ Active Optical Cable (AOC)

SFP+ Active Optical Cable (AOC) is a 10Gbps solution to 10G Ethernet, and high-performance computing applications. The integrated cable transmits 10Gbps data in each direction over a loose tube fiber with distance up to 100m. The AOC is SFP+ MSA compliance, low power consumption and lightweight.

Applications:

- 10Gigabit Ethernet
- Storage Area Networks(SAN)
- Network Attached Storage
- 8G Fibre Channel (8GFC), Fibre Channel over Ethernet (FCoE)
- Data Center BridgingInfiniBand (QDR/DDR/SDR)
- Converged Enhanced Ethernet Data Centers
- High Performance Computing



Part Number	Product Description	AWG
MD10AOC-10GSFP-P1M	10G SFP+ Active Optical Cable, 1 Meter	N/A
MD10AOC-10GSFP-P3M	10G SFP+ Active Optical Cable, 3 Meter	N/A
MD10AOC-10GSFP-P5M	10G SFP+ Active Optical Cable, 5 Meter	N/A
MD10AOC-10GSFP-P7M	10G SFP+ Active Optical Cable, 7 Meter	N/A
MD10AOC-10GSFP-P10M	10G SFP+ Active Optical Cable, 10 Meter	N/A
MD10AOC-10GSFP-P15M	10G SFP+ Active Optical Cable, 15 Meter	N/A
MD10AOC-10GSFP-P20M	10G SFP+ Active Optical Cable, 20 Meter	N/A
MD10AOC-10GSFP-P50M	10G SFP+ Active Optical Cable, 50 Meter	N/A

Note: the P/N are just for customer identify the sepcification. Will release another formal P/N & drawing (uniquie) for customer approval when customer inquiry.

25G SFP28 Twinax Copper Cable (DAC)

25G SFP28 Copper Twinax cables are suitable for very short distances and offer a highly cost-effective way to connect within racks and across adjacent racks. SFP28 cables offers a low cost SFP28 solution. SFP28 directly attached twinax cable assemblies supports 25 Gigabit Ethernet, 10 Fibre Channel, and other industry standards.

Applications:

- 25Gigabit Ethernet
- Data center cabling infrastructure
- Storage Area Networks(SAN)
- Network Attached Storage
- Storage Servers



Part Number	Product Description	AWG
25G SFP28 Copper Direct-attach cable		
MD11DAC-SFP28-P50CM	25GBASE SFP28 direct-attach copper cable, 50cm passive	30/26
MD11DAC-SFP28-P1M	25GBASE SFP28 direct-attach copper cable, 1m passive	30/26
MD11DAC-SFP28-P2M	25GBASE SFP28 direct-attach copper cable, 2m passive	30/26
MD11DAC-SFP28-P3M	25GBASE SFP28 direct-attach copper cable, 3m passive	26
MD11DAC-SFP28-P4M	25GBASE SFP28 direct-attach copper cable, 4m passive	26
MD11DAC-SFP28-P5M	25GBASE SFP28 direct-attach copper cable, 5m passive	26

25G SFP28 Active Optical Cable (AOC)

SFP28 Active Optical Cable (AOC) is a high performance integrated cable for short-range multi-lane data communication and interconnect applications. It integrates four data lanes in each direction with 25 Gbps aggregate bandwidth. Each lane can operate at 25 Gbps with lengths ranging from one to 100 m.

Application:

- High Performance and High Productivity computer interconnects
- Data Aggregation, Backplane and Proprietary Density Applications
- PCI-Express, SAS/SATA, Fibre Channel compatible interconnect
- Datacom and Telecom switch and router backplane connections

Part Number	Product Description	AWG
25G SFP28 Active Optical Cable		
MD11AOC-SFP28-1M	25G SFP28 Active Optical Cable,1 Meter	N/A
MD11AOC-SFP28-3M	25G SFP28 Active Optical Cable,3 Meters	N/A
MD11AOC-SFP28-5M	25G SFP28 Active Optical Cable,5 Meters	N/A
MD11AOC-SFP28-7M	25G SFP28 Active Optical Cable,7 Meters	N/A
MD11AOC-SFP28-10M	25G SFP28 Active Optical Cable,10 Meters	N/A
MD11AOC-SFP28-15M	25G SFP28 Active Optical Cable,15 Meters	N/A
MD11AOC-SFP28-20M	25G SFP28 Active Optical Cable,20 Meters	N/A
MD11AOC-SFP28-50M	25G SFP28 Active Optical Cable,50 Meters	N/A



Note: the P/N are just for customer identify the sepcification. Will release another formal P/N & drawing (uniqu) for customer approval when customer inquiry.

40G QSFP Twinax Copper Cable (DAC)

40G QSFP+ Copper Twinax cables are suitable for very short distances and offer a highly cost-effective way to connect within racks and across adjacent racks. SFP+ cables offers a low cost SFP+ solution. SFP+ directly attached twinax cable assemblies supports 10 Gigabit Ethernet, 10 Fibre Channel, and other industry standards.

Applications:

- 40Gigabit Ethernet
- Data center cabling infrastructure
- Storage Area Networks(SAN)
- Network Attached Storage
- Storage Servers

Part Number	Product Description	AWG
40G QSFP+ Copper Direct-attach cable		
MD12DAC-QSFP-50CM	40GBASE-CR4 QSFP+ direct-attach copper cable, 50cm passive	30/28
MD12DAC-QSFP-1M	40GBASE-CR4 QSFP+ direct-attach copper cable, 1 meters passive	30/28
MD12DAC-QSFP-2M	40GBASE-CR4 QSFP+ direct-attach copper cable, 2 meters passive	30/28
MD12DAC-QSFP-3M	40GBASE-CR4 QSFP+ direct-attach copper cable, 3 meters passive	30/28
MD12DAC-QSFP-4M	40GBASE-CR4 QSFP+ direct-attach copper cable, 4 meters passive	30/28
MD12DAC-QSFP-5M	40GBASE-CR4 QSFP+ direct-attach copper cable, 5 meters passive	30/28
MD12DAC-QSFP-7M	40GBASE-CR4 QSFP+ direct-attach copper cable, 7 meters passive	28
MD12DAC-QSFP-10M	40GBASE-CR4 QSFP+ direct-attach copper cable, 10 meters passive	24
40G QSFP+ to 4x 10G SFP+ breakout Copper Cable		
MD12DAC-QSFP-4SFP-50M	40G QSFP+ to 4x 10G SFP+ direct attach breakout cable, 50CM passive	30
MD12DAC-QSFP-4SFP-1M	40G QSFP+ to 4x 10G SFP+ direct attach breakout cable, 1 meter passive	30
MD12DAC-QSFP-4SFP-3M	40G QSFP+ to 4x 10G SFP+ direct attach breakout cable, 3 meter passive	30
MD12DAC-QSFP-4SFP-5M	40G QSFP+ to 4x 10G SFP+ direct attach breakout cable, 5 meter passive	30



40G QSFP Active Optical Cable

QSFP Active Optical Cable (AOC) is a high performance integrated cable for short-range multi-lane data communication and interconnect applications. It integrates four data lanes in each direction with 40 Gbps aggregate bandwidth. Each lane can operate at 10 Gbps with lengths ranging from one to 100 m.

Application:

- InfiniBand QDR (4 x 10G), DDR (4 x 5G) and SDR (4 x 2.5G) interconnects
- High Performance and High Productivity computer interconnects
- Data Aggregation, Backplane and Proprietary Density Applications
- PCI-Express, SAS/SATA, Fibre Channel compatible interconnect
- Datacom and Telecom switch and router backplane connections

Part Number	Product Description	AWG
40G QSFP+ Active Optical Cable AOC		
MD12AOC-QSFP-3M	40G QSFP+ Active Optical Cable,3 Meters	N/A
MD12AOC-QSFP-5M	40G QSFP+ Active Optical Cable,5 Meters	N/A
MD12AOC-QSFP-7M	40G QSFP+ Active Optical Cable,7 Meters	N/A
MD12AOC-QSFP-10M	40G QSFP+ Active Optical Cable,10 Meters	N/A
MD12AOC-QSFP-15M	40G QSFP+ Active Optical Cable,15 Meters	N/A
MD12AOC-QSFP-20M	40G QSFP+ Active Optical Cable,20 Meters	N/A
MD12AOC-QSFP-50M	40G QSFP+ Active Optical Cable,50 Meters	N/A
MD12AOC-QSFP-100M	40G QSFP+ Active Optical Cable,100 Meters	N/A
40G QSFP+ to 4x 10G SFP+ breakout AOC Cable		
MD12AOC-QSFP-4SFP-10M	40G QSFP+ to 4 10G SFP+ breakout Active Optical Cable, 10 meters	N/A



Note: the P/N are just for customer identify the sepcification. Will release another formal P/N & drawing (unique) for customer approval when customer inquiry.

100G QSFP28 Twinax Copper Cable (DAC)

QSFP28 passive copper cable assembly features eight differential copper pairs, providing four data transmission channels at speeds up to 28Gbps per channel, and meets 100G Ethernet (4x25Gbps) and InfiniBand EDR (Enhanced Data Rate) requirements. These 100G copper cable assembly features a unique construction with individually wrapped twinax pairs, resulting in low insertion loss and low cross talk.

Applications:

- Supports aggregate data rates of 100Gbps
- Low EMI radiation Switches, servers and routers
- Data Center networks
- High performance computing
- Telecommunicaiton and wireless infrastructure
- Medical diagnostics and networking
- Test and measurement equipment

Part Number	Product Description	AWG
100G QSFP+ Copper Direct-attach cable		
MD13DAC-QSFP28-50CM	100GBASE-CR4 QSFP28 direct-attach copper cable, 50cm passive	30
MD13DAC-QSFP28-1M	100GBASE-CR4 QSFP28 direct-attach copper cable, 1m passive	30
MD13DAC-QSFP28-2M	100GBASE-CR4 QSFP28 direct-attach copper cable, 2m passive	26
MD13DAC-QSFP28-3M	100GBASE-CR4 QSFP28 direct-attach copper cable, 3m passive	26
100G QSFP28 to 2x 50G SFP+ Cable		
MD13DAC-QSFP28-2SFP28-1M	100G QSFP28 to 2x 50G SFP+ direct attach breakout cable, 1M passive	30
MD13DAC-QSFP28-2SFP28-2M	100G QSFP28 to 2x 50G SFP+ direct attach breakout cable, 2M passive	30
MD13DAC-QSFP28-2SFP28-3M	100G QSFP28 to 2x 50G SFP+ direct attach breakout cable, 3M passive	30
100G QSFP28 to 4x25G SFP+ Cable		
MD13DAC-QSFP28-4SFP28-50CM	100G QSFP28 to 4x 25G SFP28 direct attach breakout cable, 0.5 meter passive	30
MD13DAC-QSFP28-4SFP28-1M	100G QSFP28 to 4x 25G SFP28 direct attach breakout cable, 1 meter passive	30
MD13DAC-QSFP28-4SFP28-2M	100G QSFP28 to 4x 25G SFP28 direct attach breakout cable, 2 meter passive	30
MD13DAC-QSFP28-4SFP28-3M	100G QSFP28 to 4x 25G SFP28 direct attach breakout cable, 3 meter passive	30



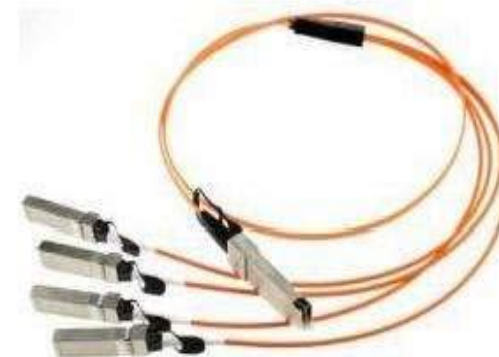
100G QSFP28 Active Optical Cable

100G QSFP28 active optical cables are compliant with 100GBASE-SR4 and CAUI-4 specification per IEEE 802.3bm. Compliant to SFF-8665 (QSFP28 Solution) Revision 1.8. Supports 100 Gbps data rate links of up to 70m/100m via OM3/OM4, respectively. Low power consumption of max 2.5W, Hot pluggable electrical interface, Using standard 12/8 lane optical fiber with 3-mm round cable. 0 to 70°C case temperature operating range, RoHS-6 Compliant (lead-free)

Applications:

- Ethernet for 100GBASE-SR4
- Infiniband EDR, FDR and QDR
- HPC Interconnects
- Proprietary Interconnections

Part Number	Product Description	AWG
100G QSFP28 AOC Direct-attach Cable		
MD13AOC-QSFP28-3M	100G QSFP28 Active Optical Cable, 3 Meters	N/A
MD13AOC-QSFP28-5M	100G QSFP28 Active Optical Cable, 5 Meters	N/A
MD13AOC-QSFP28-7M	100G QSFP28 Active Optical Cable, 7 Meters	N/A
MD13AOC-QSFP28-10M	100G QSFP28 Active Optical Cable, 10 Meters	N/A
MD13AOC-QSFP28-15M	100G QSFP28 Active Optical Cable, 15 Meters	N/A
100G QSFP28 to 4 SFP28 AOC		
MD13AOC-QSFP28-4SFP28-3M	100G QSFP28 to 4 25G SFP28 breakout Active Optical Cable, 3 meters	N/A
MD13AOC-QSFP28-4SFP28-5M	100G QSFP28 to 4 25G SFP28 breakout Active Optical Cable, 5 meters	N/A
MD13AOC-QSFP28-4SFP28-7M	100G QSFP28 to 4 25G SFP28 breakout Active Optical Cable, 7 meters	N/A
MD13AOC-QSFP28-4SFP28-10M	100G QSFP28 to 4 25G SFP28 breakout Active Optical Cable, 10 meters	N/A
MD13AOC-QSFP28-4SFP28-15M	100G QSFP28 to 4 25G SFP28 breakout Active Optical Cable, 15 meters	N/A



Note: the P/N are just for customer identify the specification. Will release another formal P/N & drawing (unique) for customer approval when customer inquiry.

Thanks for your Patient



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