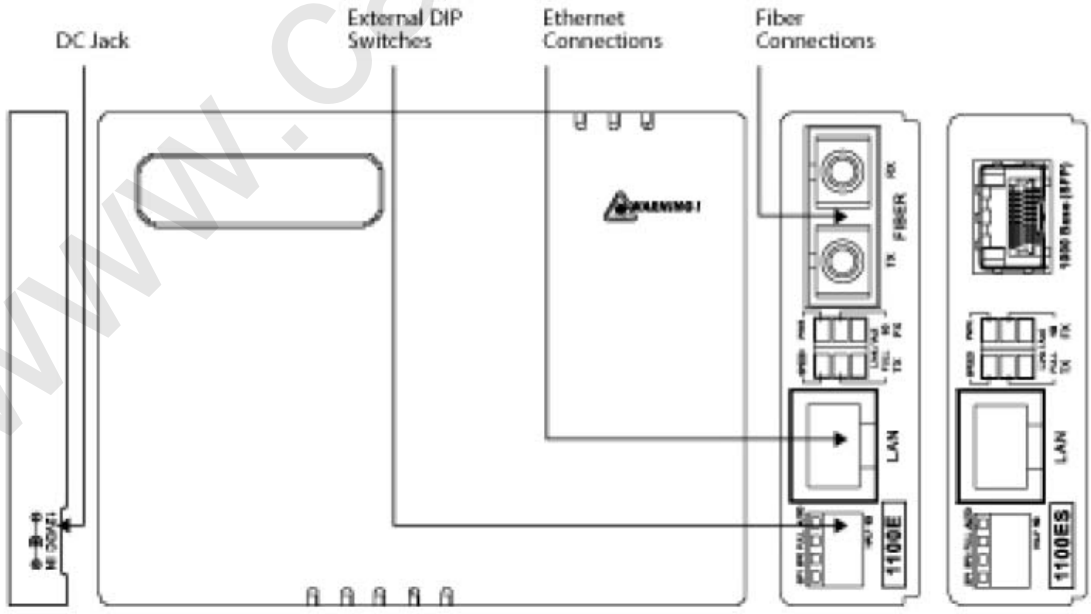
CL-MC-SFP-100/1000M
10/100/1000BASE-T/ 100BASE-FX/1000BASE-X Fiber Interface Converters

Description

The MC-SFP series you the option to choose from the most popular fiber cabling connectors. The **CL-MC-SFP-100/1000M** provides you with SC connectors or SFP slot for you fiber optic cables and RJ-45 port for 10/100/1000Base-T twisted pair cable connections. The factory default settings of Ethernet auto-negotiation and UTP full/half duplex may be modified by adjustment of external DIP switches to force Full/Half or as well as the default settings of Fibber auto-negotiation for 100M and 1G.

The **CL-MC-SFP-100/1000M** gives you the freedom to extend your 10/100/1000Mbps cabling distance by allowing connectivity up to 120 kilometers over fiber. Six LED indicators signal the power status of the convert, UTP ports speed, Link/RX, duplex status and FX port Link/RX and speed.



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Specifcations

Standard

IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, 100BASE-FX
IEEE802.3ab 1000Base-T and 802.3z 1000Base-SX/LX
N-Way Auto Negotiation

10/100/1000Base-T RJ-45 Connectors

One RJ-45 connector is provided for connection to either MDI-X (To PC) or MDI (To HUB) equipment. Utilizing Auto MDI/MDIX allows all UTP connections to be made using only a common straight-through UTP cable.

RJ-45 Pin	*568-A type*	*568-B type*
5	Pair1 -Tip	Pair1 - Tip
4	Pair1 -Ring	Pair1 -Ring
3	Pair2 -Tip	Pair3 - Tip
6	Pair2 -Ring	Pair3 -Ring
1	Pair3 -Tip	Pair2 - Tip
2	Pair3 -Ring	Pair2 - Ring
7	Pair4 -Tip	Pair4 - Tip
8	Pair4 -Ring	Pair4 -Ring

1000BASE-T UTP Cable

Cable type: 1000Base-T; 4 pair , Cat. 5, EIA/TIA-568, STP/UTP Maximum cable distance: 100 meters (328 feet)

Fiber Optic Connectors

The CL-MCSFP-1 has two SC connectors. One is labeled "Tx" for transmission of optical data, the other is labeled "Rx" for reception of optical data. The BiDi transceiver has only a single SC connector.
The CL-MCSFP-1 has an SFP slot LC connector.

Environment	*Power*	*Dimension*
Temperature : 0 C ~ 50 C Humidity: 5-95% non condensing	AC adaptor +12V / 1A	73.4mm x 108mm x 23mm (W x D x H)

DIP Switch Setting

DIP	*Function*	*State*	*Status*
SP1 SP0 Full	UTP Mode	Off Off Off	UTP/NWAY
		On Off Off	1000/Full
		Off On Off	100/Full
		Off On On	100/Half
		On On Off	10/Full
		On On On	10/Half
Auto	Fiber negotiation	Off	Auto 100/1000
		On	1000 only

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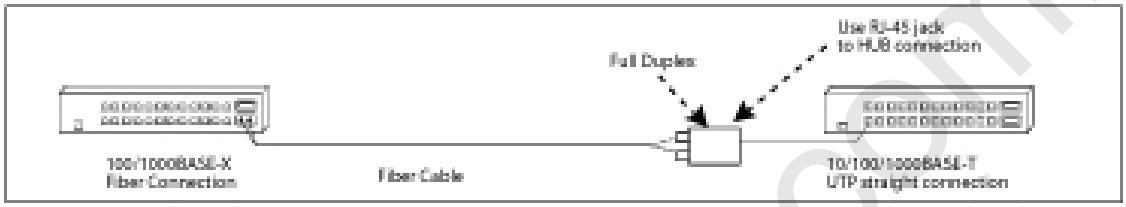
Installation

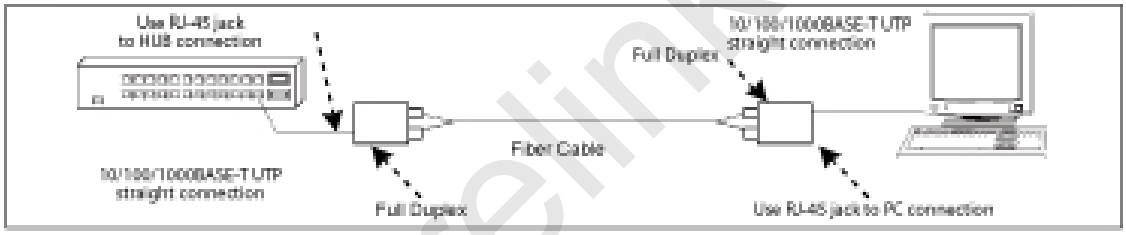
Connect the Ethernet cable to the CL-MCSFP-1. The converter will sense whether to operate in Full or Half mode and will be indicated on the LED. Follow the connection examples below. Install the fiber converter with the DC power adapter provided (+12VDC, 1A) and connect the adapter to an AC outlet.

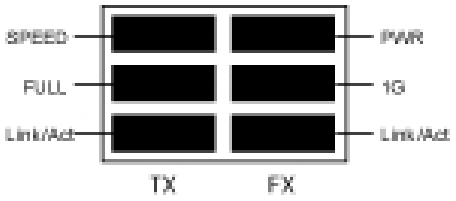
Connections

The following example illustrates the connection scheme when connecting from a 10/100/1000BASE-T port of one HUB to a 100BASE-FX or 1000BASE-X port of another HUB through the fiber converter.



The following example illustrates the connection scheme when connecting from a 10/100/1000BASE-T port of one HUB to a 10/100/1000BASE-T Network Interface Card (NIC) in a computer through the fiber converter.





LED Indicators

LED	*Function*	*State*	*Status*
PWR	Power indicator	On	Converter has power.
		Off	Converter has no power.
Fiber llink/Act	Fiber link & activity	On	The fiber link is ok.
		Off	No link or the link is faulty.
		Blinking	Data Active on the fiber.
1G	Fiber Speed	On	Fiber oprated in 1000mbps.
		Off	Fiber oprated in 100mbps.
SPEED	UTP Speed	Orange	Ethernet operates in 1000Mbps.
		Green	Ethernet operates in 100Mbps.
		Off	Ethernet operates in 10 Mbps.
Full	Mode display	On	Full duplex mode.
		Off	Half duplex mode.
TX link/Act	Ethernet link & activity	On	The UTP link is ok.
		Off	No link or the link is faulty.
		Blinking	Data Active on the Ethernet.

TRADEMARKS

Ethernet is a registered trademark of Xerox Corp
ST® is a registered trademark of AT&T.
OptoLocks is a registered trademark of Finecomms.

WARNING

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference in which case the user will be required to correct the interference at his own expense. NOTICE: (1) The changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. (2) Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
CISPR PUB.22 Class A COMPLIANCE:
This device complies with EMC directive of the European Community and meets or exceeds the following technical standard. EN 55022 -Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment. This device complies with CISPR Class A.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE NOTICE

Marking by the symbol CE indicates compliance of this equipment to the EMC directive of the European Community. Such marking is indicative that this equipment meets or exceeds the following technical standards:
EN 55022:1994/A1:1995/A2:1997 Class A and EN61000-3-2:1995, EN61000-3-3:1995 and EN50082-1:1997