

Fiber Media converter

The non-managed media converters, which give you economic solutions for media conversion between fiber and copper Ethernet. It provides you SC,FC or ST connectors for your fiber optic cables and RJ45 for twisted pair UTP cable connection. The maximum extension is up to 120km over fiber.

Features

- In conformity to IEEE802.3 10base-T, IEEE802.3u 100 base-TX/FX, IEEE802.3ab 1000 base-T, IEEE802.3z, 1000base-SX/LX, IEEE802.1a, IEEE802.1PQ0S, IEEE802.1d Spanning Tree.
- Hot Plug-gable & Wall-Mountable.
- Stable performance more than 50thousand hours with fault-free.
- Unique IC solution applied.
- Supports 10/100Mbps and 10/100/1000M full/half duplex, easy upgrades.
- Auto MDI/MDI-X.
- Auto Negotiation.
- Support flow control.
- Concentrated into EF16-D220(16slot for media converter cards) or EF14-D220(14slot for media converter standalone type) 2U rack-mount chassis.
- Stable performance more than 50 thousands hours with fault-free.
- In conformity with safety code of FCC, CE and RoHS
- Easy-to-view LED indicators provide status to monitor network activity easily
- SC connector, UPC, autosensing

Specification

Optical Interface	Connector	1x9 SC/FC/ST
	Data Rate	100Mbps, 1000Mbps
	Duplex Mode	Full duplex
	Fiber	MM 50/125um,62.5/125um SM 9/125um
	Distance	10/100Mbps: MM 2km,SM 25/40/60/80/100/120km 10/100/1000Mbps: MM 550m/2km,SM 20/40/60/80/100km
	Wavelength	MM 850nm, 1310nm SM 1310nm, 1550nm WDM Tx1310/Rx1550nm(A side),Tx1550/Rx1310nm(B side) WDM Tx1490/Rx1550nm(A side),Tx1550/Rx1490nm(B side)

UTP Interface	Connector	RJ45
	Data Rate	10/100Mbps, 10/100/1000Mbps
	Duplex Mode	Half/full duplex
	Cable	Cat5,Cat6
Power Input	Adapter Type	DC5V, Optional(12V,24V or 48V)
	Power Built-in Type	AC100~240V
Power Consumption		<3W
Weight	Adapter Type	0.39kg
	Power Built-in Type	0.67kg
Dimensions	Adapter Type	94*70 5*26 5mm
	Power Built-in Type	140.5*111*30mm
Temperature		0~50℃ Operating; -40~70℃ Storage
Humidity		5~95%(no condensing)
MTBF		≥10.0000h
Certification		CE,FCC,RoHS

Optional Function - DIP SWITCH

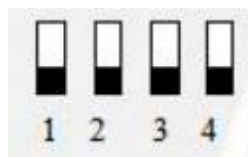


Figure 1 . Dip Switch

Dip Switch, Top position is ON, Low position is OFF

Table 1 .Dip Switch Function

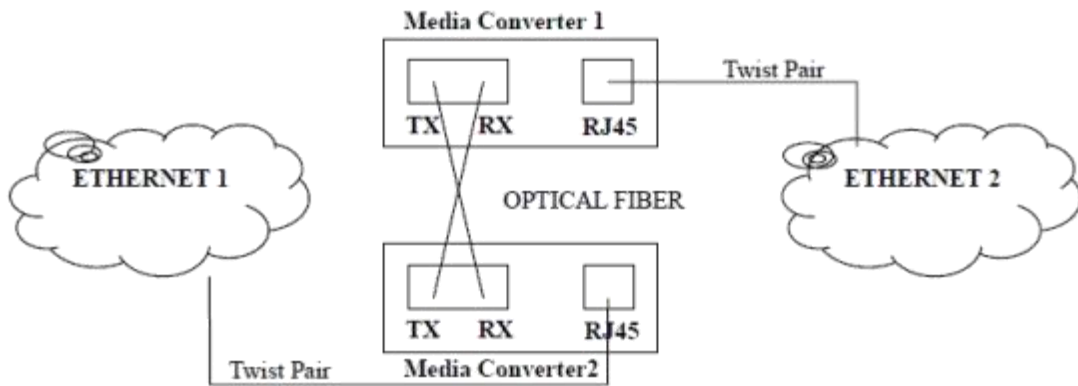
No.	Switch Function	Description
1	LFP	ON - Link fault pass through(LFP) OFF - Default Disable status
2	Ethernet	ON - Force Ethernet working states OFF - 10/100/1000M Auto adaptive
3	Data Rate	ON - 10Mbps OFF - 100Mbps
4	Duplex	ON - Half Duplex OFF - Full Duplex

Table 2 .LED Status Instruction

Name	FUNCTION	STATUS	OPERATION
PWR	POWER	ON	Power on
		OFF	Power off
FX	Optical Signal	ON	Connected
		OFF	Not link
TX	Ethernet	ON	Connected
FDX	Ethernet	ON	Full duplex
		OFF	Half duplex
100	Ethernet	ON	100Mbps signal
		OFF	10Mbps signal
Link/Act	Fiber/Ethernet	ON	Connected
		FLASH	Data flow
		OFF	Not link
100M	Ethernet	ON	100Mbps signal
1000M	Ethernet	ON	1000Mbps signal

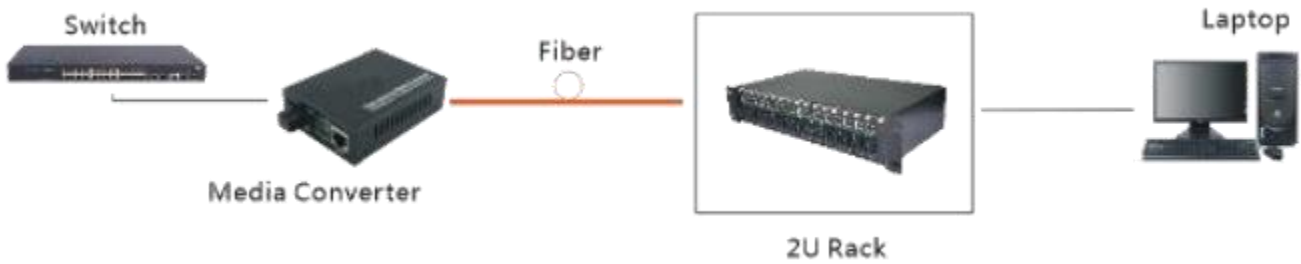
Application

- Extend your Ethernet connection up to 0~120km away using fiber optics
- Creates an economical Ethernet-fiber/copper-fiber link for connecting remote sub-networks to larger fiber optic networks/backbones
- Converts Ethernet to fiber, fiber to copper/Ethernet, ensuring optimum network scalability for connecting two or more Ethernet network nodes (e.g. connecting two buildings on the same campus)
- Designed to provide high-speed bandwidth for demanding large scale work groups that require expansion of Gigabit Ethernet Network

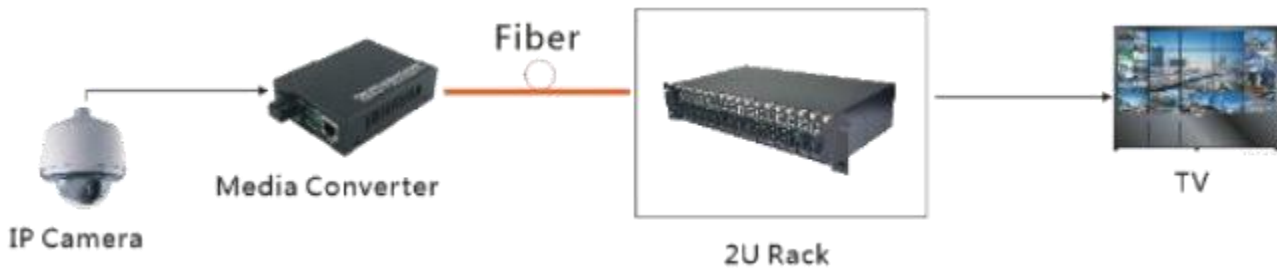


System Design

1. For Networking



2. For CCTV Surveillance Security





Order Information

Part Number	Rate	Optic fiber	Wavelength (nm)	Power (dBm)	Rx sensitivity (dBm)	Reach (KM)	Loss allowed (dBm)
EM-100-M2	10/100Mbps	MM	1310	-20~-1 2	-30	2	10
EM-100-S25	10/100Mbps	SM	1310	-15~-7	-34	25	19
EM-100-S40	10/100Mbps	SM	1310	-9~-5	-36	40	27
EM-100-S60	10/100Mbps	SM	1310	-5~-2	-36	60	31
EM-100-S80	10/100Mbps	SM	1550	-5~0	-37	80	32
EM-100-S100	10/100Mbps	SM	1550	-3~0	-38	100	35
EM-100-S120	10/100Mbps	SM	1550	0~5	-38	120	38
EM-1100-M05	10/100/1000Mbps	MM	850	-9.5~4	-17	0.55	8
EM-1100-M2	10/100/1000Mbps	MM	1310	-9~-3	-21	2	12
EM-1100-S20	10/100/1000Mbps	SM	1310	-6~-1	-21	20	15
EM-1100-S40	10/100/1000Mbps	SM	1310	-5~0	-24	40	20
EM-1100-S60	10/100/1000Mbps	SM	1550	-5~0	-25	60	20
EM-1100-S80	10/100/1000Mbps	SM	1550	-2~3	-25	80	25
EM-100-BS2A	10/100Mbps	MM	1310/1550	-14~-8	-30	2	17
EM-100-BS2B	10/100Mbps	MM	1550/1310	-14~-8	-30	2	17
EM-100-BS20A	10/100Mbps	SM	1310/1550	-8~-3	-33	20	25
EM-100-BS20B	10/100Mbps	SM	1550/1310	-8~-3	-33	20	25
EM-100-BS25A	10/100Mbps	SM	1310/1550	-8~-3	-33	25	25
EM-100-BS25B	10/100Mbps	SM	1550/1310	-8~-3	-33	25	25
EM-100-BS40A	10/100Mbps	SM	1310/1550	-8~-3	-33	40	25
EM-100-BS40B	10/100Mbps	SM	1550/1310	-8~-3	-33	40	25
EM-100-BS60A	10/100Mbps	SM	1310/1550	-5~0	-37	60	30
EM-100-BS60B	10/100Mbps	SM	1550/1310	-5~0	-37	60	30



EM-100-BS80A	10/100Mbps	SM	1490/1550	-0~0	-39	80	34
EM-100-BS80B	10/100Mbps	SM	1550/1490	-0~0	-39	80	34
EM-100-BS100A	10/100Mbps	SM	1490/1550	-0~0	-39	100	34
EM-100-BS100B	10/100Mbps	SM	1550/1490	-0~0	-39	100	34
EM-100-BS120A	10/100Mbps	SM	1490/1550	-0~0	-39	120	34
EM-100-BS120B	10/100Mbps	SM	1550/1490	-0~0	-39	120	34
EM-1100-BS10A	10/100/1000Mbps	SM	1310/1550	-6~-1	-22	10	22
EM-1100-BS10B	10/100/1000Mbps	SM	1550/1310	-6~-1	-22	10	22
EM-1100-BS20A	10/100/1000Mbps	SM	1310/1550	-6~-1	-22	20	22
EM-1100-BS20B	10/100/1000Mbps	SM	1550/1310	-6~-1	-22	20	22
EM-1100-BS40A	10/100/1000Mbps	SM	1310/1550	-6~-1	-22	40	22
EM-1100-BS40B	10/100/1000Mbps	SM	1550/1310	-6~-1	-22	40	22
EM-1100-BS60A	10/100/1000Mbps	SM	1490/1550	-6~-1	-22	60	22
EM-1100-BS60B	10/100/1000Mbps	SM	1550/1490	-6~-1	-22	60	22
EM-1100-BS80A	10/100/1000Mbps	SM	1490/1550	0~2	-25	80	25
EM-1100-BS80B	10/100/1000Mbps	SM	1550/1490	0~2	-25	80	25