



4 Port Ethernet to E1 Media Converter (Pair)

CM-UM-E104-0004



Product Description

The 4 Port Ethernet to E1 Media Converter connects 4 Fast Ethernet (100BASE-TX) ports to be transmitted over E1 signals. This converter enables efficient data transmission over E1 networks. This device must be used in pairs to transmit data over E1 signals. Utilizing FPGA technology, it supports transparent ethernet transmission and automatically detects active E1 channels while compensating for time delays. This converter supports features such as VLAN support, dynamic MAC address filtering, and auto-negotiation for duplex operations. This is the ideal converter to use to transmit the data of ethernet devices over E1 networks.



E1 Interface

Interface Standard	ITU-T G.703
Data Rate	n*64Kbps ±50ppm
Line Coding	HDB3
Impedance	75Ω (unbalanced), 120Ω (balanced)
Jitter Tolerance	Complies with G.742 and G.823
Allowed Attenuation	0~6dBm

Power

Power Input	220VAC -48VDC 24VDC
Self Consumption	10W

Environmental Standards

Storage Temperature	-40°C to 80°C
Operating Temperature	-10°C to 50°C
Humidity Tolerance	5% to 95%

Ethernet Interface

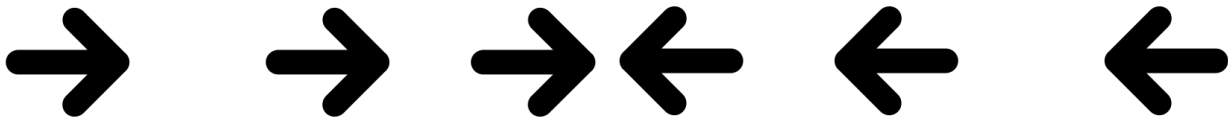
Connector	RJ45, Auto-MDIX support
Data Rate	10/100 Mbps (half/full duplex auto-negotiation)
Ethernet Standards	IEEE 802.3 IEEE 802.1Q (VLAN)
Address Table	4096 MAC addresses

Physical Properties

Weight	2500g
Case Material	Aluminum
Dimensions (H x D x W)	45mm x 150mm x 490mm
Mounting	19" 1U rack mount

Application Diagram

Ethernet Devices	Ethernet to E1 Media Converter	E1 Transmission	Ethernet to E1 Media Converter	Ethernet Devices
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Indicators

Indicator	Color	Status	Description
PWR	Green	On	Power is on
		Off	Power is off
TEST	Green	On	Device is in test mode
		Off	Device is in normal mode
LNK (RJ45)	Green	On	Ethernet link is established (link up)
		Off	Ethernet link is not established (link down)
SPD (RJ45)	Red	On	Ethernet rate is 100 Mbps
		Off	Ethernet rate is 10 Mbps or link is down
LOS 1-4	Red	On	E1 signal loss detected on channels 1 to 4
		Flash	Remote E1 alarm detected on channels 1 to 4
		Off	Normal operation (no E1 signal loss)
CRC 1-4	Red	On	CRC error detected on channels 1 to 4, exceeding limitation
		Flash	Loop detected on channels 1 to 4
		Off	Normal operation (no CRC errors detected)



DIP Switch 1 - Alarm Masking

DIP Switch	Status	Description
DIP 1	On	Mask total E1 alarm
	Off	Display total E1 alarm (Default)
LOS	On	Mask E1 LOS alarm
	Off	Display E1 LOS alarm (Default)
LOF	On	Mask E1 LOF alarm
	Off	Display E1 LOF alarm (Default)
LOM	On	Mask E1 LOM alarm
	Off	Display E1 LOM alarm (Default)
AIS	On	Mask E1 AIS alarm
	Off	Display E1 AIS alarm (Default)
LOOP	On	Mask E1 LOOP alarm
	Off	Display E1 LOOP alarm (Default)
CRC	On	Mask E1 CRC alarm
	Off	Display E1 CRC alarm (Default)
L/R	On	LED displays for remote (Valid for DIP2 only, RST and AUTO CUT are valid; other DIP2 settings are invalid)
	Off	LED displays for local (Default)



DIP Switch 2 - Function Control

DIP Switch	Status	Description
DIP 2	On	Turn on E1 local loop
	Off	Turn off E1 local loop (Default)
E1 L	On	Turn on E1 remote loop
	Off	Turn off E1 remote loop (Default)
ETH R	On	Turn on Ethernet remote loop
	Off	Turn off Ethernet remote loop (Default)
ETH L	On	Turn on Ethernet local loop
	Off	Turn off Ethernet local loop (Default)

Any questions?

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