



## ◆ 4E1-4FE Logical Isolation Converter (Desktop Type)

### ➤ Features

- Based on self -copyright IC
- To achieve Ethernet data transparent transmission in 1-4E1 circuits
- Can realize the local and the remote device reset
- Ethernet Interface is 100BASE-FX, support VLAN protocol
- Inter-set dynamic Ethernet MAC address (4,096) with local data frame filtering function
- Single Channel lines rate is 1984Kbit/s, 4Channel Bandwidth is up to 7936Kbit/s
- 4-Channel 10M/100M Ethernet interface can isolate each other to realize communication independently
- Ethernet interface supports 10M/100M, half/full duplex auto- adaptable and AUTO-MDIX (crossed line and straightly connected line self-adaptable )
- CRC automatic alarm threshold can be set to isolate the poor quality transmission lines and cut off a single-direction. When 2M branch circuit one direction error rate exceeds threshold, cutting off this direction the other direction is not affected; that is to say, both of the Ethernet direction transmission can be asymmetric
- Allow 4-Channel E1 transmission time delay difference 100ms. When the margin exceed the allowed range, the system can automatically stop on the E1 that time delay is too large to send data
- E1 interface conform to ITU-T G.703, G.704 and G.823, not support the use of signal timeslot
- E1 interface module with inter-set clock recovery circuit and HDB3 code circuit
- Support E1 channel hot-plug in the device, and automatically detects the effective E1 channel and will not interrupt data transmission
- Can support 1-4Channel E1 channel configuration, can automatically detect the number of E1 and select the E1 available;



### ➤ Introduction

This interface converter is based on FPGA, using reverse direction multiplexing technology to bundle for multiple E1 circuits to transmit the Ethernet data of 4Channel 100BASE-TX. It can realize 1~4 E1 channel to convert between Ethernet optical interface. This device can transmit the transceiver signal point to point to Ethernet optical interface to make E1 channels interconnected with Ethernet optical interface. Unlike general remote network bridge, this device can support 1-4Channel E1 channel configuration, can automatically detect the number of E1 and select the E1 available. It allows E1 lines transmission time delay difference.

### ➤ Specification

#### E1 Interface

Interface Standard	comply with protocol G.703
Interface Rate	n*64Kbps ± 50ppm
Interface Code	HDB3
E1 Impedance	75Ω (unbalance), 120Ω (balance)
Jitter tolerance	In accord with protocol G.742 and G.823
Allowed Attenuation	0~6dBm

**Ethernet interface (10/100M)**

Interface rate	10/100 Mbps, half/full duplex auto-negotiation
Standard	Compatible with IEEE 802.3, IEEE 802.1Q (VLAN)
MAC Address Capability	4096
Connector	RJ45, support Auto-MDIX

**Power**

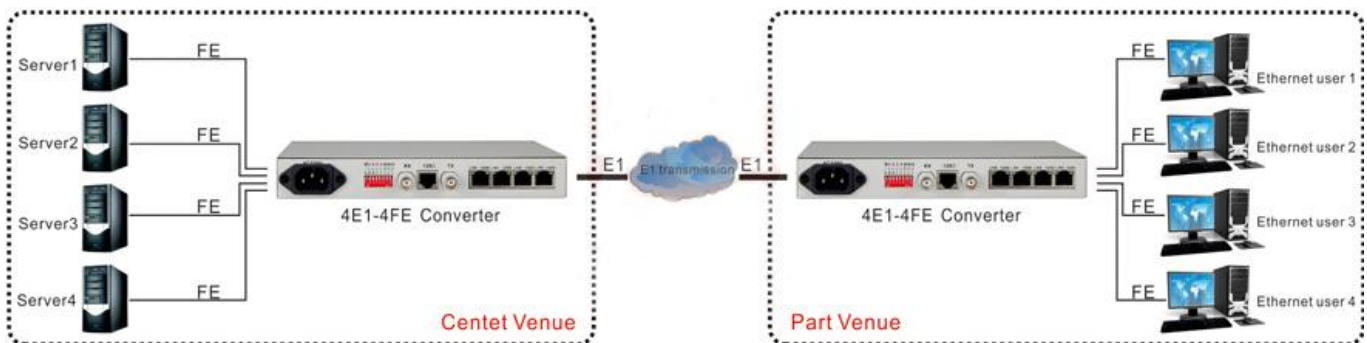
Power supply	AC180V ~ 260V; DC-48V; DC +24V
Power consumption	≤10W

**Dimension**

Product Size	216*140*31mm(W*D*H)
Simple packaging	274*193*84mm(W*D*H)
Piece Weight	1.2KG

**Working environment**

Working temperature:	-10° C ~ 50° C
Storage temperature	-40°C ~ 80°C
Humidity	5% ~ 95% (no condensation)
Warranty	3years

**➤ Application****➤ Order information**

Model NO.	Description
MW70E	Framed E1-FE Converter, AC220V or DC48V
MW80E	Unframed E1-FE Converter, AC220V or DC48V
MW70E4	Framed E1-4FE Converter, AC220V or DC48V
MW80E4	Unframed E1-4FE Converter, AC220V or DC48V
MW704E4	4E1-4FE Logical Isolation, AC220V or DC48V
MW708E4	8E1-4FE Logical Isolation, AC220V or DC48V