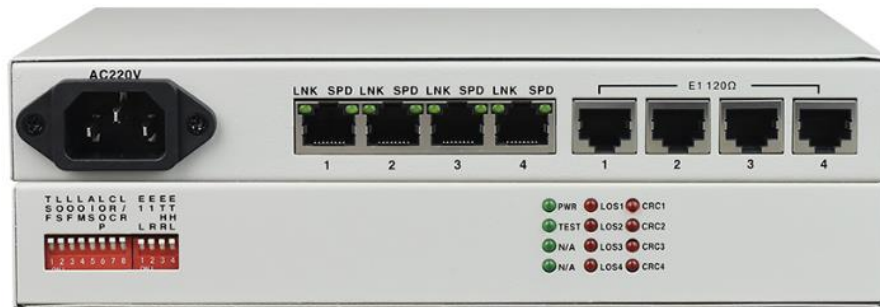


## Overview

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.

## Product Photo



Desktop Type



19 Inch 1U 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
- 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 onedirection error rate exceeds threshold, cutting off this direction the other direction is not affected; that is to say, both of the Ethernet directiontransmission 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;

## Parameters

### E1 Interface

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

## ◆ Ethernet interface(10/100M)

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

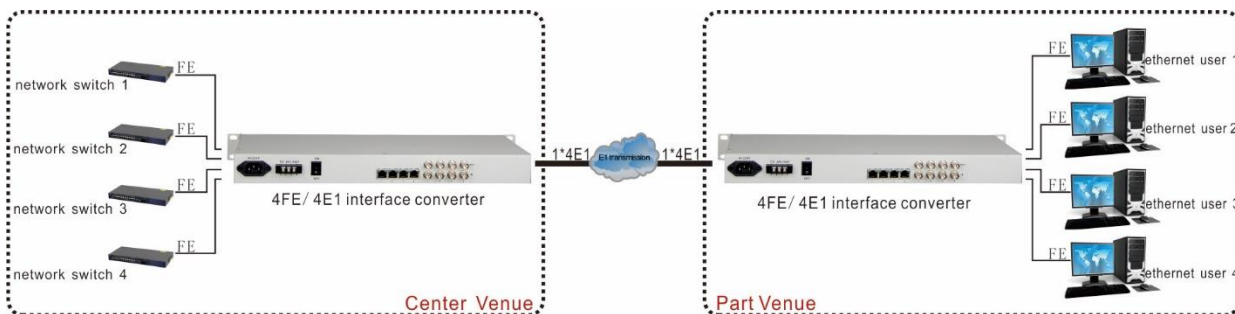
## ◆ Working environment

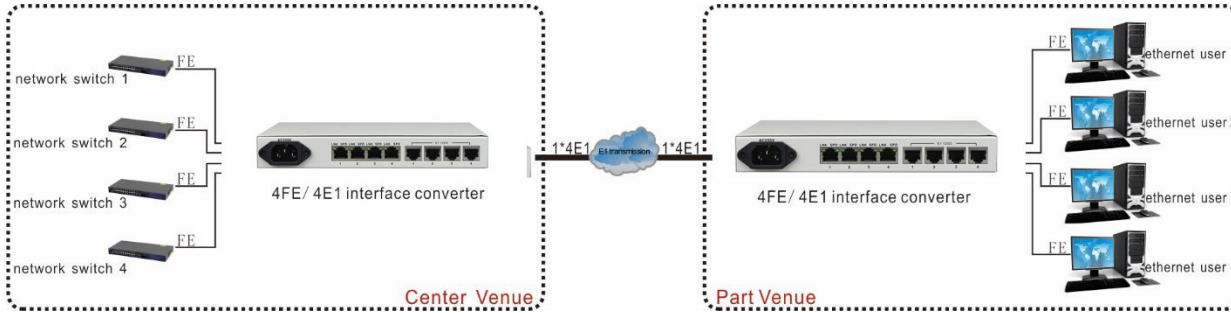
<b>Working temperature:</b>	-10°C ~ 50°C
<b>Working Humidity:</b>	5%~95 % (no condensation)
<b>Storage temperature:</b>	-40°C ~ 80°C
<b>Storage Humidity:</b>	5%~95 % (no condensation)

## ⋮ Specifications

<b>Model</b>	Model Number: FCC-E4F4
<b>Functional Description</b>	4E1/4FE interface Converter, Ethernet can be divided into logical isolation
<b>Port Description</b>	4* E1 interface ; 4 *FE Interface
<b>Power</b>	Power supply: AC180V ~ 260V ; DC -48V ; DC +24V Power consumption: ≤10W
<b>Dimension</b>	Product Size: Mini type 216X140X31mm (WXDXH),1.3KG/piece 19inch 1U type 483X138X44mm (WXDXH),2.0KG/piece

## ⋮ Application





## Application description:

When the device set logical isolation ,can be achieved Independent communications between A - A1, B - B1, C - C1 and D - D1.

1. Protocol converters are used in pairs;
2. 1-4channel E1 transmission line bandwidth 1984Kbit / s -7936Kbit / s.