

# MODEL NAME: EB04 (4 E1/10BaseT converter)

# **Functions**

4E1-10/100BT serial interface converter used back multiplexing technology, transfer 10M/100M Ethernet data by using multi E1 channels. Realize convert between 1 to 4 E1 channels and Ethernet interface. It can transmit signal of E1 channel to RJ45 interface point to point, realize the connection of E1 channel and Ethernet. It different from normal bridge, supporting 1 to 4 E1 channels customized configuration, auto detecting the number of E1 channels and use the available E1, allow some limiting transfer delay between different E1 channels. Single line speed is 1968Kbits/s, 4 channels can up to 7872Kbits/s, it can connect with Ethernet switch or hub when in 10/100Mbps full/half duplex mode, make use of mass E1 resource in telecommunication networks to expend the transfer distance and application field of Ethernet, is a suitable solution for broadband switch in of Ethernet. It can used in fields such as connecting LANs, connecting end offices, VOD, remote monitor, E1 interface of switches, etc.

#### **Features**

- Realize transparent transfer Ethernet data in 1 to 4 E1 channels
- 10M/100M Ethernet, full/half duplex self adapt, support VLAN.
- Ethernet support AUTO-MDIX( cross over and straight through self adapt)
- setting CRC alarm limitation to auto isolate lines with low transfer quality, single direction. When one direction error rate over limitation, disconnect only one direction, the other is not affected. Unbalance in two directions.
- Allow 4 E1 channels up to 10ms transfer delay. when the delay over the limitation, can stop transfer automatically.
- Having 2 loop back functions: E1 local loop, E1 external loop.
- Support Dynamic Ethernet MAC address(4096), having local address filter function.
- E1 interface compatible with ITU-T G.703,G.704,and G.823. signaling slot not supported.
- E1 interface having internal clock resume circuit and HDB3 codec circuit.
- support E1 channel hot plug, and auto detect available E1 channels not pause the transmission.
- supporting 1 to 4 E1 channels customized configuration, auto detect the number of E1 channels and select the available E1 at reset.
- **■** E1 Support 75 $\Omega$ /unbalance impedance or 120 $\Omega$ /balance for order
- support reset remote system from local system.
- having Ethernet monitor auto reset function.

### Parameter and specifications

#### ■E1 interface

Standard: E1 interface compatible with G.703 standard.

Rate: 2.048Mbit/s±50ppm

Coding: HDB3

Impedance:  $75\Omega$ (unbalance) or  $120\Omega$ (balance)

Connector: BNC(75 $\Omega$ ) or RJ45(120 $\Omega$ )

Jitter Performance: According to G.742 and G.823

■10/100Base-T

Rate: 10M/100M, full/half duplex self adapt.

Protocol: support IEEE 802.3, IEEE 802.1 P, 802.1Q (VLAN)

MAC address table: 4096 MAC addresses.

Ethernet buffer: 64Mbits SDRAM

Physical interface: RJ45, support AUTO-MDIX(cross over and straight through self adapt)

**Operating environment** 

Voltage: DC-48V, input range: DC-36V~DC-72V Voltage: AC220V, input range: AC90V~AC260V

Power Consumption: <=5 Watts Working temperature: 0°C~50°C

Storage temperature: -40°C~+70°C

Humidity: 95%

No causticity and solvent, dust free, and no strong magnetic interference.

#### **DIMENSIONS**

Mini type:210(W) × 140 (L) x 30(H) mm

19inch Type:433 mm (L) ×138mm (W) × 44 mm (H)

### Ordering information:

EB04/AC/MIN/75 mini type 4E1-ETH converter, 75 $\Omega$ , 220V EB04/DC48/MINI/75 mini type 4E1-ETH converter, 75  $\Omega$ , DC-48V EB04/AC/19INCH/75 19inch rackmount 4E1-ETH converter, 75Ω, 220V EB04/DC48/19INCH/75

19inch rackmount 4E1-ETH converter, 75 Ω,DC-48V

mini type 4E1-ETH converter, 120Ω, 220V EB04/AC/MINI/120

EB04/DC48/MINI/120 mini type 4E1-ETH converter, 120 Ω, DC-48V 19inch rackmount 4E1-ETH converter, 120Ω, 220V EB04/AC/19INCH/120

19inch rackmount 4E1-ETH converter, 120 Ω, DC-48V EB04/DC48/19INCH/120

EB04/AC+DC48V/19INCH/75 19inch rackmount 4E1-ETH converter, 75Ω, AC220V +DC48V EB04/AC+DC48/19INCH/120 19inch rackmount 4E1-ETH converter, 120 Ω, AC220V +DC48V

## **Application**

