



◆ Framed E1 to Ethernet 10/100BaseT(x) interface converter

➤ Features

- Realizes monitoring of remote equipment from local equipment;
- LED indicate local status and remote status, easy to understand easy to use
- Based on self -copyright IC.
- DIP switch management
- Ethernet interface half/full duplex self adapt, support VLAN
- Ethernet interface support auto-mdix.
- Provide 2 clock types: E1 internal clock, E1 external clock.
- Provide 3 loop functions: local loop, to remote loop, order remote loop.
- Have pseudo random code test function, easy the installation and maintenance.
- E1 can support rate $N*64k$ ($N=1$ to 32)
- Provide 2 impedances: 75 Ohm unbalance and 120 Ohm balance.
- Have Ethernet monitor self-reset function, equipment will not dead.
- Provide detecting real time Ethernet communication status.



➤ Introduction

FE1-ETH Interface Converter is an Ethernet bridge of high performance, which accomplishes the converting between the 10/1000M Ethernet port and the E1 port. As an extended device of the Ethernet, the FE1-ETH Bridge realizes interconnection of two Ethernet by using the E1 channel provided by existing networks with low cost.

10/1000BASE-TX (RJ45) interfaces are provided at the end of Ethernet LAN to accomplish various functions including MAC address self-learning, address filtering, address table maintenance and flow control.

E1 interfaces conforming to ITU-T G.703 and G.704 proposals are provided at the end of WAN, supporting RJ45 and BNC connection modes. The E1 ports support both framing and un-framing architecture. The user can select an operating mode for the E1 interface according to the connected E1 environment. This provides flexibility of network application. In the framing mode, the E1 interface provides a rate of $N*64Kbps$ ($N=1\sim31$). In the un-framing mode, the E1 channel provides a rate of 2.048Mbps and accomplishes transparent transmission.

The FE1-ETH Bridge provides plenty of self-test functions, supporting local loop and remote loop. It also provides pseudo random code test function to test error codes in the circuit.

FE1-ETH convertor provide conversion from ITU-T G.703 E1 fractional interface to 1 10/100Base-T Ethernet interface. used widely in connecting between WAN and LAN, monitoring, etc.

➤ Specification

E1 interface

Channel capacity	1 Channel
Interface Rate	n x 64Kbps (n=1~ 32)
Bit rate	2.048Mb/s±50ppm
Code format:	HDB3
Impedance	75 Ohm BNC and 120 Ohm RJ48
Pulse Shape	ITU-T G.703, G.704
Jitter Performance	ITU-T G.823
Clock mode	internal-clock, external-clock

Ethernet interface

Interface Rate	10/100BaseTx
Duplex	half / full duplex self-adapt.
Interface character	IEEE802.3U, IEEE802.3x, IEEE802.1Q (VLAN)
Connector	RJ45
MAC table	4096

Physical

Dimension	140mm(D)*40mm(H)*210mm(W)
Weight	1Kg
Power supply	DC 48V or AC96 -260V or DC&AC dual power
Power consumption	3W
Operating temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 80°C
Humidity	≤95%, free from condensing

➤ Ordering Information

Model NO.	Description
FE1-ETH-00	Framed (fractional nx64k bit/s) 2048 Kbps E1 - Ethernet, 75ohm&120ohm, 85~264VAC
FE1-ETH-01	Framed (fractional nx64k bit/s) 2048 Kbps E1 - Ethernet , 75ohm&120ohm, -48 VDC

➤ Application

