

4E1-OP*Eth Interface Converter



This converter provides conversion from 1 to 4 E1 channels to 1 Ethernet interface & 1 optical Ethernet 100BaseFX port with built-in switch. Support 1 to 4 E1 channels setting, it can detect the number of E1 channel and select available channel. It can reach 8.192 M bandwidth when 4 E1 channels work simultaneously. Transmit Ethernet signal (RJ45) via point-to-point to remote RJ45 or fiber optical interface, realize connection between E1 channel and Ethernet as bridge. Can satisfy real-time video, audio, and data transmit.

PRODUCT CHARACTER:

- (1) E1 channels (from channel 1 to channel 4) are used to transparently transmit Ethernet data at 10M/100M.
- (2) Built-in SDRAM controller with capacity of 1M *16Bits.
- (3) During the Ethernet data transmission, frame reordering is carried out at E1 line side, thus to effectively ensure the frame sequence and enhance the transmission efficiency.
- (4) Between the 1~4 E1 lines, the allowed maximum transmission delay for ensuring the frame sequence is 16 ms, in which case, the device can operate stably and reliably under various complicated network conditions.
- (5) During Ethernet data transmission, the channel overhead occupied by every E1 line is simply 64Kbps, and the actual effective bandwidth for each E1 is 1.984Mbps.
- (6) Automatically detecting the available channels among the four E1 lines, and distributing bandwidth.
- (7) Supporting CRC error code threshold configuration for each E1 line. The system will automatically switch off and isolate an E1 line if the error code rate of the line exceeds the configured threshold.
- (8) The switch-off and isolation function can be fulfilled in one way, i.e., only the line exceeding the error code threshold will be switched off, and the transmission in the other direction will not be impacted, which can realize the asymmetric Ethernet data transmission in two directions to ensure the maximum data transmission efficiency.
- (9) Providing abundant alarm functions of LED indicator for fast diagnosis.
- (10) Local loopback function available (outward loopback of four E1 channels together)
- (11) When the device works normally, plug and play of a random E1 line will not influence the normal work of the device.

TECHNICAL SPECIFICATION:**E1 interface:**

interface standard: according to G.703

Interface Rate: 2.048Mbps±50ppm

Jitter tolerance: according to G.742 and G.823.

transmission capability: 4*E1

clock mode: inter-clock, line-clock

connector: BNC (75Ω) 、RJ45 (120Ω)

E1 Impedance: 75Ω(unbalance), 120Ω(balance).

10/100 Base-T interface:

Interface Rate: 10/100Mbps

Duplex: half and full duplex self-adapt.

Interface character: match IEEE802.3, IEEE802.1Q(VLAN).

Connector: RJ45, support auto-mdix

MAC address capability: 4096

Fiber interface:

Working mode: 100Base-FX

Optical wavelength: 850, 1310 or 1550nm, optional

Type of optical interface: FC/SC optional; single/multi- mode;

Single/dual fiber; and optional transmission distance;

Only applied to be butt connected with optical switch or fiber transceiver complying with fast Ethernet protocol (IEEE 802.3u Fast Ethernet).

Working environment:

power supply: AC220/110V; DC -48V

power consumption: ≤5W

working temperature: 0°C ~ 50°C

storage temperature: -40°C ~ +70°C

humidity: 95 %

Typical Application: