

4E1-OP*Eth Interface Converter



This converter provides conversion from 1 to 4 E1 channels to 4 electrical 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 simultaneity. 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) Ethernet interface 10M/100M, full/half duplex self-adapt, Support Auto-MDX/MDIX.
- (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) Automatic detection 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 and LOS, AIS alarms are present.
- (8) The switch-off and isolation function can be fulfilled in one way, i.e., only the line exceeding the error code threshold or LOS, AIS alarms are present, 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) Local loopback function available (outward loopback of four E1 channels together)

TECHNICAL SPECIFICATION:

E1 interface Standard:

interface standard: according to ITU-T G.703

Interface Rate: 2.048Mbps+50ppm, Line Code: HDB3

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

Transmission capability: 4*E1

Clock mode: inter-clock, line-clock

Connector: (75Ω) with DB37 to BNC adapter or (120Ω) with DB37 to RJ45 adapter

E1 Impedance: BNC 75Ω(unbalance), RJ45 120Ω(balance).

10/100 Base-T interface:

Interface Rate: 10/100BaseT

Mode: half and full duplex self-adapt, auto negotiation and flow control

Interface character: match IEEE802.3

Number of available ports: 4x10/100BaseTx port

Connector: RJ45

10/100 BaseFx interface:

Working mode: 100Base-FX

Mode: half and full duplex self-adapt, auto negotiation and flow control

Number of available ports: 1x10/100Base Fx port

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

Fiber interface Options

- * Optical wavelength: 850, 1310 or 1550nm, optional
- * Average optical power: ≥-8dBm (single mode, 1310, LED, 10 Km)
≥-18dBm (multi-mode, 850, LED, 2Km)
- * Receiving sensitivity: ≤-36dBm
- * Dynamic range of receiving optical power: ≥25dB
- * Type of optical interface: FC/SC optional; single/multi- mode;
- * Single/dual fiber; and optional transmission distance;

Management:

· Configuration by dip-switches

· E1 loopback to remote unit and local unit

Leds Indicators:

- Electrical ETH indicators: Link, SPD, F/D
- Optical ETH indicators: Link/LOS,
- E1 indicators: LOS1-4, AIS1-4 (remote Alarm Indication Signal)
- Power indication: on/off

Environment:

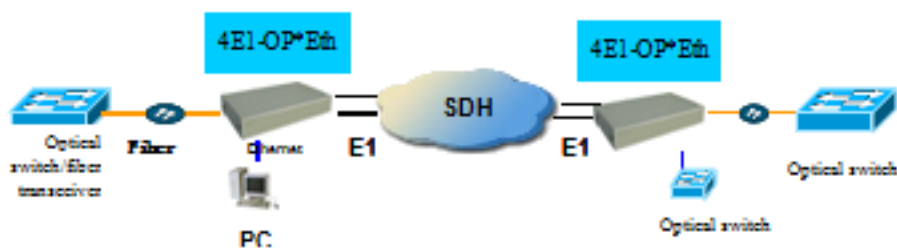
- Power Input:
 - AC: 85- 264V, 50/60HZ or DC: -36V~-72VDC;
 - AC+DC: 85- 264VAC or -36V~-72VDC(both in the same chassis).
- Power consumption: ≤3W
- Operating temperature: -5℃~+50℃, Storage temperature: -20℃ ~+80℃
- Humidity: 5%~90%
- No corrosive and solvent Gas, no fluty dust and intense magnetic-field interference

Mechanical Parameter:

- Dimension: 218mm x136mm x 44mm (W,D,H)
- Weight: 1.0kg

Packing list:

- 4E1-2ETH converter
- Printed Manual – quick setup
- Single 19" rack mount kits and mounting accessories
- AC/DC power supply cable
- Connectors: 8xBNC male connector and 1x RJ45 plug connector

Typical Application:

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