# winyuan

# 4 x E1 to 4 x 10/100 Ethernet Interface Converter with NMS remote monitoring



# **Spot-light:**

4E1-4ETH converter provides easy conversion from 1 to 4 E1 channels to 4 x Ethernet ports. Support 1 to 4 E1 channels setting, it can detect the number of E1 channel and select available channel, also it's equipped with NMS GUI for remote and local monitoring purposes.

## **Description:**

4E1-4ETH Interface Converter is a device that takes ASIC chip as its core and enables Ethernet data to be transmitted through multi 4E1 channels. 4E1-4ETH Interface Converter breaks through the bandwidth limit of single E1 Ethernet bridge. It is very easy to make use of the existing rich E1 resources in the public networks to quickly extend the range of the Ethernet LAN. 4E1-4ETH Interface Converter is an enhancement model of the Ethernet to multi E1 converter. It means that with a built-in bit error detector, the device can find which E1 is not capable to be used because of too much bit errors, and then automatically cut down the bad one, to keep the Ethernet data transmission continuously.

4E1-4ETH Interface Converter is a multifunction and high performance L2 switch which build in the port cross engine to realize the conversion between two Ethernet interface and E1 interface. The equipment supports the function used as Ethernet transceiver or Ethernet net bridge. As the extension of Ethernet, This converter may realize Ethernet interconnection at low cost via the E1 channel provided by existing network.

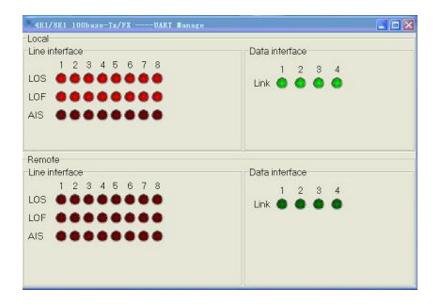
E1 interfaces conforming to ITU-T G.703 and G.704 proposals are provided at the end of WAN, supporting RJ45 and BNC connection modes. The E1 ports support both framing and un-framing architecture. Each channel can support 31 time slots for

transmit. The 4 E1 channel provides a rate of 7.936 Mbps and accomplishes transparent transmission.

The equipment uses 10/100BASE-T Ethernet interfaces and supports adaptive 10/100M half/full duplex mode. Ethernet devices connected to4E1-4ETH bridge (such as SWITCH, HUB, Ethernet adapter card (NIC), etc.) can be set to 10M full duplex, 10M half duplex, adaptive 10M half/full duplex and adaptive 10/100M.

Users can directly query and set the status of a pair of devices with the 4E1 management software Via RS232 wire (available 3 line,2—2,3—3,5--5). The software will automatic test the device's type model and the currently state of Ethernet, the alarm of every channel E1's LOS, LOF, AIS. For the normal E1 channel, we can check the state of remote Ethernet connecting, etc.

#### Screenshot of GUI NMS are presented below:



#### **Features:**

- According with IEEE 802.3, support 10Base-T, 100Base-T
- Support flexible setting of 1 to 4 E1 channels, auto detect the number of E1 channels and time-delay, select available E1 channels and more;
- Ethernet transmission transparent, support AUTO-MDIX, straight and crossover auto-adapt.
- Support E1 channel hot plug, and auto detect available E1 channels.
- Support reset remote system from local system.
- 4 E1 can have 10 ms time-delay, transmit channel by configuration, CRC alarm limitation can auto insulate bad-quality transmit channel, and is single direction

insulation. when one direction error rate over limitation, cut only this direction, the other direction not affected. ( the two directions need not symmetry.)

• Power supply option: AC96 - 260V, DC-48V.

• Performs inverse multiplexing to send Ethernet bundled over 4E1, to get speed close to 8 M bit/s;

- Remote GUI NMS monitoring software in set
- Both E1 interfaces RJ-45 and BNC already on board.

### **Specifications**

#### E1 interface:

Impedance 750hm, physical interface BNC Impedance 120 ohm, physical interface RJ45Interface rate: 2.048 Mbps Coding: HDB3 Jitter tolerance: according with protocol G.823 Output jitter < 0.05UI Transmission range: 300m (UTP) 600m (coaxial cable)

#### Ethernet interface (RJ45):

Data Rate: 10/100Mbps auto-negotiation Connector: RJ-45 Full duplex auto-negotiation

#### Architecture:

Stand alone: 19 in standard 1U cabinet;

#### **Power supply:**

Stand alone: 85V~264V AC input,5V/2A output -38V~-58V DC input,5V/2A output

#### **Other Specification**

Operation temperature: $0^{\circ}C \sim 50^{\circ}C$ Storage temperature: $-20^{\circ}C \sim 80^{\circ}C$ Humidity: $5\% \sim 90\%$  (no condensation)

## **Ordering Information:**

4E1-4ETH /AC	4 x E1 - 4 ETH interface convertor, 75/120 ohm E1 impedance supported, 96 ~220V AC
4E1-4ETH / DC	4 x E1 - 4 ETH interface convertor, 75/120 ohm E1 impedance supported, DC 48 V
4E1-4ETH /ACDC	4 x E1 - 4 ETH interface convertor, 75/120 ohm E1 impedance supported, DC 48 V + AC 96 ~220 VAC

# **Application:**

