

## 16E1-4\*10/100BaseT Ethernet converter

**Model:AZ-SEOP-16E1**



### **Functions:**

16E1-10/100BT serial interface converter used back multiplexing technology, transfer 10M/100M Ethernet data by using multi E1 channels. Realize convert between 1 to 16 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 16 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 2M, 16 channels can up to 32M. 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. The device support Network Management via SNMP and GUI .Compliant to international standards, the device can communicate with products from other manufacturers adopting the same standards.

### **Features:**

#### E1 interface

Supports automatic removal and recovery of E1 channels that used for carrying payload. The E1 channels that have urgent alarm, such as LOS and LOF, or the Bit Error Rate (BER) exceeds  $1E-6$ , are removed automatically, and during this period, some Ethernet packets may be lost; It will be resumed when the fault dismisses .

Supports the embedded E1 BER Tester function, to detect any E1 channel of 16 channels. When the embedded E1 BER Tester is used via CLI command, the particular E1 channel on testing mode can not convey E1 service, while the other E1 channels are not affected by the BER test.

The differential delay between any two of the 16 E1 can be up to 220ms; when the factual differential delay exceeds 220ms, alarm is generated and Ethernet is cut off.

Jitter tolerance and jitter transfer characteristic compliant to ITU-T G.823.

### Ethernet interface

Support 4 shared Ethernet interfaces, or 3 electrical Ethernet and one optical Ethernet port.

1024 MAC address table and 5-minute aging time.

Accepts frames with length between 64 and 1916 bytes (otherwise filtering).

VLAN function based on tags compliant to IEEE 802.1Q.

Throughout statistic of the Ethernet packets based on port, such as error packets.

Configurable pause flow control .

Optional optical Ethernet interface compliant to IEEE 802.3u 100BASE-FX standard (can communicate with remote optical transceiver) and electrical Ethernet interface compliant to IEEE 802.3u 100 BASE-TX standard.

### Management interface

GUI via serial RS232 port and telnet.

network management platform based on SNMP.

Compliant to ITU-T standards

GFP-F encapsulation recommendation G.7041.

Virtual concatenation(VCAT) and Link Capacity Adjustment Scheme (LCAS) recommendation G.7042.

Ethernet to nxE1 mapping recommendation G.7043.

Ethernet to single E1 mapping recommendation G.8040.

Remote/local E1 loopback function will be convenient for E1 line(transmission system included) testing . Supporting Remote/Local E1 loopback.

Supporting 1 to 16 E1 channels customized configuration, auto detect the number of E1 channels and select the available E1 at reset.

E1 Support BNC(75Ω)/unbalance or RJ45(120 Ω)/balance

### E1 Interface

Line Rate: 2.048Mbps±50ppm

Line Code : HDB3

Interface Standard: ITU-T G.703

E1 Port: 75Ω(unbalance) or 120Ω(balance)

Connections : dual coax BNC or RJ45

Jitter tolerance : finer than G.742 and G.823

### 10/100Base-T Interface

Rate: 10/100M, full/duplex auto-negotiation

Protocol: Support IEEE 802.3, IEEE 802.1Q (VLAN)

MAC Address Entries: 1024 Entries

Physical interface: RJ45, support AUTO-MDIX

### Power supply

working voltage range wide, good anti-disturb and Isolation, work stable  
option I – DC-48V, range DC-36V~DC-72C  
option II – AC220V, range AC165V~AC240V

### environment condition

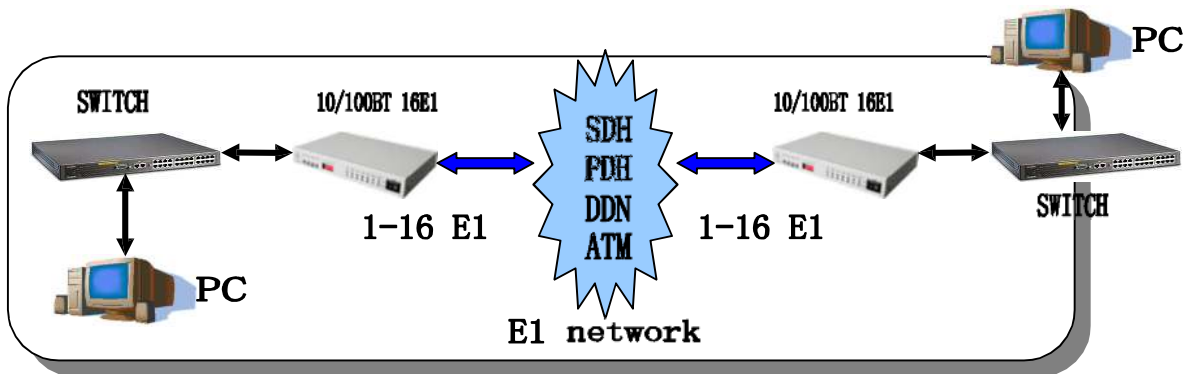
Operating temperature: 0C~+50 C Storage temperature: -20 C~+70 C Relative temperature: 95% (uncondensed)

### Dimension

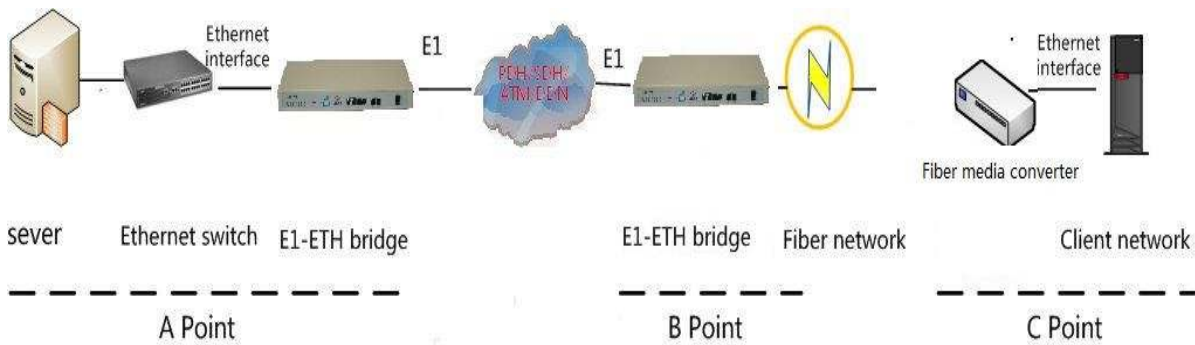
433mm(L)  
138mm(W)  
44mm(H)

## Application

16E1 to Ethernet converter, 4\*10/100M Ethernet working scheme



16E1 to Ethernet converter, 3\*10/100M Ethernet and 1 optical port work scheme



**Order information:**



AZ-SEOP-16E1	16E1 to Ethernet converter,4*10/100M Ethernet,E1 75ohm or 120ohm,support Rs232 Network management (GUI),Power AC220V or DC48V
AZ-SEOP-16E1/3ETH/1FX	16E1 to Ethernet converter,3*10/100M Ethernet and 1 optical SC or FC port,E1 75ohm or 120ohm,support Rs232 Network management (GUI),Power AC220V or DC48V
AZ-SEOP-16E1/SNMP	16E1 to Ethernet converter,4*10/100M Ethernet,E1 75ohm or120ohm,support Rs232 Network management (GUI) and SNMP management,Power AC220V or DC48V