



E1/T1 over Ethernet Multiplexer, E1 TDM over IP



Spot-light:

1 x E1 G.703 TDM over IP | E1 over IP | E1 to Ethernet converter | mini type unit for small applications where only 1 E1 is needed and installation space is limited.

Description:

EthMux V801 is used to setup 1 transparent E1 channel over LAN or IP networks.

The **EthMux V801** has many optional parameters, which can be modified by the user to suite different application requirements. Please read this manual carefully before installing the product.

It is well known that the E1 signal comes from PCM technology which is TDM in nature. It transmits information in a constant bit rate of E1_2048kbit/s, TDM technology occupies fixed transmission bandwidth, with QoS features suitable for real-time applications such as voice and video. The QoS features include short and stable transmission delay, low jitter and wander, etc.

The most widely used application of **EthMux V801** is to set up point to point wireless E1 links using low cost wireless LAN bridges. **EthMux V801** can work with most LAN bridges on the market.

Until recently, voice and data were, and still are to a large extent, transported over two separate networks. But the requirement for both types of information to be carried over a unified network is growing rapid. Packets over SONET/SDH techniques to integrate date into the TDM network have been around for many years. But for voice over packet based data networks, most of the efforts are spent on creating special equipment that packets voice or video signals, such as VoIP techniques.

The **EthMux V801** can be used to emulate transparent E1 channels over an Ethernet with adequate QoS, so that most of the existing E1 based applications can be readily setup over Ethernet LANs and WANs. One particular suited application is to build E1 links with low cost wireless LAN bridges, replacing much more costly microwave radios.

Both Web Server and SNMP management are supported through anyone of two Ethernet ports. The management has four sections: Status, Line Test, Configuration and System

The screenshot displays the web management interface for the EthMux V801. On the left is a vertical navigation menu with the following sections:

- Status**
 - Equipment Status
 - Line Status
- Line Test**
 - Line Loopback
- Configuration**
 - Line Management
 - Vlan Management
 - Eth Port Status
- System**
 - Network Management
 - Change Password
 - Default Parameter
 - Save
 - Reboot

The main content area shows two configuration forms:

Configuration Information I

Attribute	Value
Line Type	E1
Encapsulation Level	2
Use IP Encapsulation	Yes

Buttons: Submit, Reset

Configuration Information II

Port	Service No.	Enable	Destination IP	Timing Mode	Jitter Buffer	From Remote Port
1	chnl 1	<input checked="" type="checkbox"/>	192.168.1.3	Adaptive	16 ms	1

Buttons: Submit, Reset

Features:

- User-friendly Web server supported for easy setup and maintenance
- Support both WEB server and SNMP network management
- Point to point and point to multipoint supported
- Uplink ports 1+1 backup supported
- Stable E1 clock recovery, low jitter and wander
- Low processing delay for E1 channels, high bandwidth usage efficiency
- Resist to packet loss, with PCM frame synchronization protection
- User definable encapsulation packet size for different application
- Support Ethernet encapsulation and UDP/IP protocol encapsulation
- Support VLAN settings for E1 service and in band VLAN management.
- Enough jitter buffer to resist packet delay variation (PDV)
- Local and remote E1 LOS and AIS and packet loss indication for trouble-shooting and maintenance
- Hardware and software program online upgrade

Specifications:

E1 interface

Comply with ITU-T G.703 recommendation

E1 port impedance E1-120Ω for twisted pair cables or 75Ω for coax (The RJ45 E1-120Ω are default for ports)

End-to-end delay (minimum delay setting) ≤ 10ms

Output frequency offset (adaptive timing, stabilized) ≤ 5 ppm

Output jitter (adaptive timing) ≤ 0.1UI

10/100Base-Tx port

Comply with IEEE 802.3

10M/100M Adaptive

Half/Full Duplex Adaptive

Support 802.1Q MAC

Uplink ports 1+1 backup supported

Two user data ports supported. And Web manager supported through anyone of two user data ports.

Power

AC: 100V~260V/50Hz (fuse: 1A)

DC: -38V ~ -62V (optional)

Power Consumption: ≤ 4W

Operating condition

Temperature: (0~45) °C

Humidity: ≤ 90% (non-condensing)

Dimensions

Width × Height × Depth: 185 × 35 × 138 mm

Weight

≤ 1 kg

Ordering Information:

EthMux V801/AC	E1 to Ethernet converter / multiplexer (TDM over IP), with 1-port E1 and 2-port 10/100Base-T interfaces for downlink, 1+1 ports 10/100Base-T interfaces for uplink, 75ohm/120ohm optional, AC220V
EthMux V801/DC	E1 to Ethernet converter / multiplexer (TDM over IP), with 1-port E1 and 2-port 10/100Base-T interfaces for downlink, 1+1 ports 10/100Base-T interfaces for uplink, 75ohm/120ohm optional, DC-48V

Application:

