# winyuan

# 2E1/T1 over Ethernet Multiplexer, 2E1 TDM over IP



# **Spot-light:**

 $2 \times E1$  G.703 TDM over IP | E1 over IP | E1 to Ethernet converter | mini type unit for applications where 2 E1 is needed and installation space is limited and PMP - **Point to Multipoint** feature support is needed.

# **Description:**

EthMux V802 is used to setup 2 transparent E1's channel over LAN or IP networks

The **EthMux V802** 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 V802** is to set up point to point wireless E1 links using low cost wireless LAN bridges. **EthMux V802** 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 V802 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.

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<b>Status</b> Equipment Status		Configu	ration Information I		_	
Line Status	Attribu	Attribute		Value		
	Line Ty	pe	E1 🖌			
	Encapsulation Level		2 😽			
Line Test	Use IP Encap	sulation	Yes 🛩			
<u>Line Loopback</u>		Sub	mit Reset			
Configuration		Configu	ration Information II			
Line Management	Port Service No.	Enable Destin	ation IP Timing Mode	Jitter Buffer	From Remote Port	
<u>Vlan Management</u>	1 chnl 1	192.168.1	I.3 Adaptive 🍸	16 ms	1	
<u>Eth Port Status</u>		Sub	mit Reset			
System						
Network Management						
Change Password						
<u>Default Parameter</u>						
<u>Save</u>						
<u>Reboot</u>						

#### **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 E1-120 $\Omega$  for twisted pair cables or 75 $\Omega$  for coax (The RJ45 E1-120 $\Omega$  are default for ports) End-to-end delay (minimum delay setting)  $\leq 10$ ms Output frequency offset (adaptive timing, stabilized)  $\leq 5$  ppm Output jitter (adaptive timing)  $\leq 0.1$ UI

#### 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:  $100V \sim 260V/50Hz$  (fuse: 1A) DC:  $-38V \sim -62V$  (optional) Power Consumption:  $\leq 4W$ 

#### **Operating condition**

Temperature:  $(0 \sim 45)$  °C Humidity:  $\leq 90\%$  (non-condensing)

#### Dimensions

Width  $\times$  Height  $\times$  Depth: 185 $\times$ 35 $\times$ 138 mm

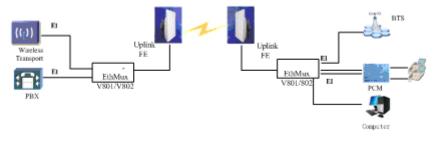
#### Weight

 $\leq 1 \text{ kg}$ 

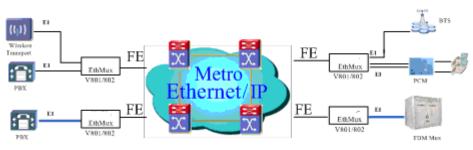
### **Ordering Information:**

EthMux V802/AC	2E1 to Ethernet converter / multiplexer (TDM over IP) ,with 2-port E1 and		
	2-port 10/100Base-T interfaces for downlink, 1+1 ports 10/100Base-T		
	interfaces for uplink, 750hm/1200hm optional, AC220V		
EthMux V802/ DC	2E1 to Ethernet converter / multiplexer (TDM over IP) ,with 2-port E1 and		
	2-port 10/100Base-T interfaces for downlink, 1+1 ports 10/100Base-T		
	interfaces for uplink, 750hm/1200hm optional, DC-48V		

# **Application:**



(a) Application in wireless



(b) Point to Multipoint Application