Eth-Mux E1 over Ethernet multiplexer (TDM over IP)

Overview

As a cost effective solution for the traditional telecom services migrate to the IP packet networking technology. EW-EthMux adopts the innovative TDM over IP technology. It transports the legacy E1 data through the existing IP network.

EW-EthMux is the second generation of the TDM over IP equipment with IP circuit emulation that support transportation of two E1 and two local Ethernet ports over IP network. The uplink port and user data ports are IEEE802.3 compliant 10/100Base T auto-sense Ethernet ports.

The state-of-art design provides the highest availability with the accurate timing signal and data bit stream reconstruction. Predefined system parameter profiles that according to different application requirements ultimately simplify the installation process and saving the maintenance cost.
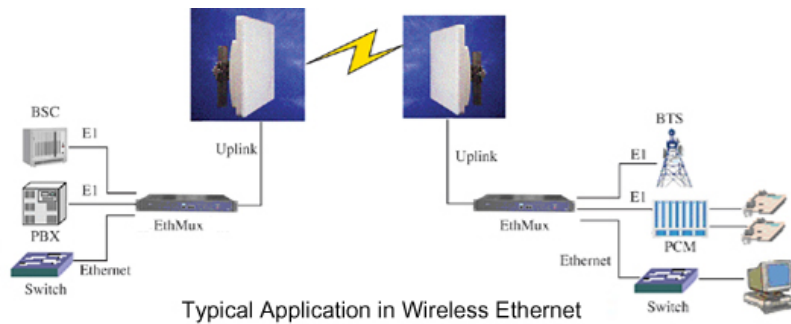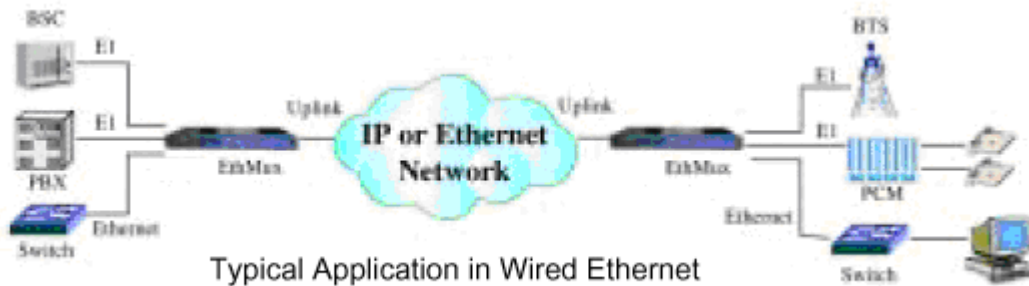
Telecom and enterprise users can save a lot of access and equipment costs and generates new revenue by offering different types of services over existing Ethernet networks. It is also suitable for connecting to the wireless equipment to achieve fast deployment of E1 services. One particular application is to build E1 links with low cost wireless LAN Bridge, replacing much more costly microwave radios. Operators can use EW-EthMux to provide legacy TDM service over wired or wireless packet network.

Features

1. Stable E1 clock recovery, low jitter and wander.
2. Low processing delay for E1 channels, high bandwidth usage efficiency.
3. Resist to packet loss, with PCM frame synchronization protection.
4. User definable packet size from 128 bytes up to 1408 bytes.
5. Enough jitter buffer to resist packet delay variation (PDV).
6. Local Ethernet port throughput limiting assuring E1 QoS.
7. Local and remote E1 LOS and AIS packet loss indication for trouble-shooting and maintenance.

8. Adaptive E1 port impendence (75 ohm and 120 ohm) for coax and twisted pair cables.
9. User selectable level 2 (Ethernet) or level 3(IP) encapsulation options.
10. Quick setup hardware mode switch.
11. Support cascade concatenate for more than 2E1 pots.

Application

Typical Application in Wired Ethernet

Typical Application in Wireless Ethernet

Specifications

Items	Description	
Model	PRO -EthMux V2	1 uplink, 2E1s, 2 User Data Ports
	PRO -EthMux V0	1 uplink, 2E1s
Interfaces	Uplink	Comply with IEEE 802.3
	E1 Port	2 E1 Ports Supported Comply with G.703 Impedance: 75 Ω and 120 Ω
	User Data Por t (Note: only available on PRO -EthMux V2)	2 User Data Ports Supported Comply with IEEE 802.3 10/100Mbps auto-sensed Full/Half Duplex auto-sensed
Console	RS232, DB9F	9600-8-N-1
Power Supply	AC Type	220V (165～ 265V)
	DC Type	-48V (-36V～-72V)
		+24V(+18V～+36V)
	Consumption	≤ 10W
Working Environment	Temperature	0～50℃
	Relative Humidity	≤ 90% (non-condensing)
Dimension	W x H x D (mm):	440 x 44 x 209

Interoperability Table with Wireless Bridge

LOGO	Manufacturer	Place	Model
MOTOROLA intelligence everywhere / CANOPY	MOTOROLA	USA	CANOPY 5700BH, 5700BH20 etc.
alvarion	Alvarion	Israel	BREEZENET DS.11, 28B,LBetc
proxim	Proxim	USA	Tsunami(tm) MP.11a QuickBridge20etc
	Wi-Comm United	Canada	Ultima 3 series Libra 5800series
Orthogon Systems	Orthogon Systems, Roots Communications	UK, Singapore	OS Gemini 58xx
InfiNet wireless	Infinet Wireless	Russia	RWR 5000mini

Note: Other wireless bridge is adding