E1 over Ethernet Multiplexer
(TDM over IP)

Model: BD-E1-IP

Brief Introduction

As a cost effective solution for the traditional telecom services migrate to the IP packet networking technology, BD-E1-IP adopts the innovative TDM over IP technology, it transports the legacy E1 data through the existing Ethernet or IP network.

BD-E1-IP is the new generation of the TDM over IP equipment with IP circuit emulation that supports transportation of E1 over Ethernet or E1 over IP network. The uplink ports are IEEE 802.3 compliant, 10/100BaseT auto-sensed Ethernet port.

The Ethernet over E1 converter is a mini type device,which only half occupation of 19" device.It is very convenient for customer to use it.

The state-of-the-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 requirement; 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 service 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 bridges, replacing much more costly microwave radios. Operators can use BD-E1-IP-A to provide legacy TDM services over wired or wireless packet network.

Features

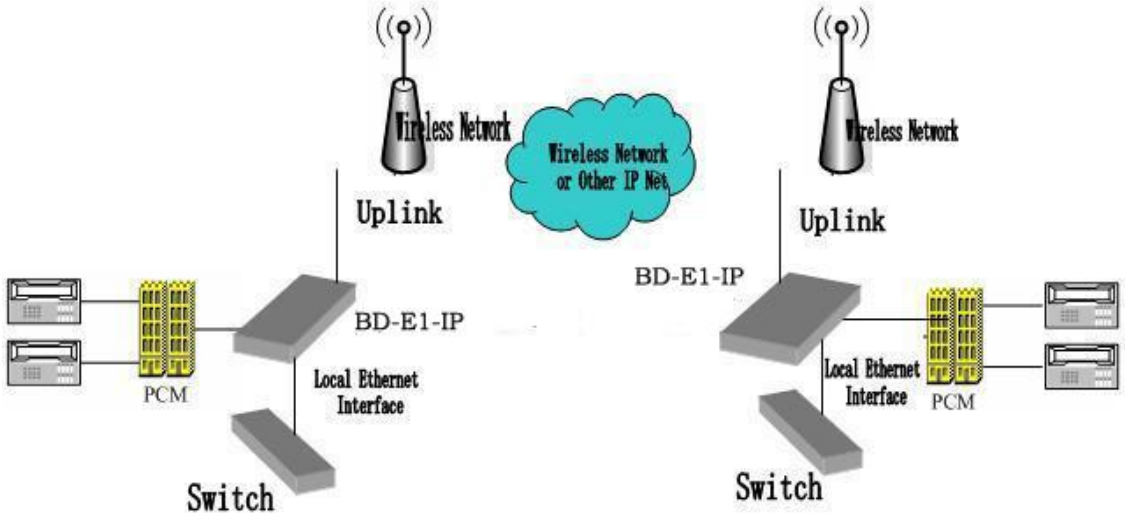
1. Support IETF RFC4553 SAToP protocol, Ethernet encapsulation support IP/UDP,L2TPv3 and MPLS.
2. Provide 4 FE electrical ports (2 uplink ports, 2 user data ports) and 1 FE optical port,2 data ports also can be used as monitoring ports, optical port can be used as uplink or user data.
3. User-friendly Web server supported for easy setup and maintenance
4. Support SNMP V1/V2 network management
5. E1 clock supports 3 mode: local clock, adaptive and loopback
6. Ethernet built-in layer 2 switch, support VLAN(port based, 802.1Q based and QinQ based), QoS(port based、8021.1P based、MAC based and TOS based).
7. Ethernet support IEEE 802.3x, Trunk, LACP, RSTP (802.1w), LLDP, CDP, Ethernet ring protection, OAM and MAC address automatic learning

8. Ethernet packet size up to 9720byte
9. Point to point and point to multipoint supported
10. Local Ethernet port throughput limiting
11. Software and hardware online upgrade
12. Power supply redundancy

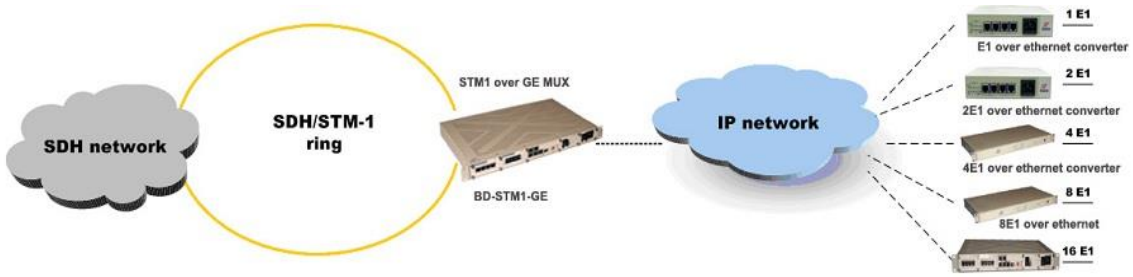
Technical Specifications

Item	Description	
Model	BD-E1-IP	2 Uplinks(1+1),1 E1 or T1
Interfaces	Ethernet port	4 FE electrical ports and 1 FE optical port Comply with IEEE 802.3, 802.1Q, 802.1P, 802.3x Speed and duplex auto-negotiation or manual
	E1 Port	E1 Ports Comply with G.703 Impedance: E1-120Ω/T1-100Ω or 75Ω
Power	Supply	DC -48V（-36V ~ -72V）
		AC ~220V（100V ~ 260V）
	Consumption	≤3W
Working Environment	Temperature	0~ 50°C
	Relative Humidity	≤90% (non-condensing)
Dimension	W x H x D (mm):	185x35x 136.5

Typical Application



Point to Point Application



Point to Multipoint Application

Interoperability Table with Wireless Bridges

LOGO	Manufacturer	Place	Model
MOTOROLA intelligence everywhere / CANOPY Motorola Wireless Internet Platform	MOTOROLA	USA	CANOPY 5700BH, 5700BH20, BH45, Gemini series, Spectra series etc.
alvarion We're on your wavelength.	Alvarion	Israel	BREEZENET DS.11, 28B,LBetc
proxim WIRELESS NETWORKS	Proxim	USA	Tsunami™ series, QuickBridge20etc
	Wi-Comm United	Canada	Ultima 3 series Libra 5800 series
InfiNet wireless	Infinet Wireless	Russia	RWR 5000mini
Note: More wireless bridges are supported			