

# IPM-E1/IPM-4E1

E1/4x E1 over Ethernet with Web Management



**Supports P to P & P to M Operation**

IPM-E1/4E1 is designed as a multi-service access platform for PDH over IP applications. E1 frames can be mapped/de-mapped into/from IP packets. An adaptive clock recovery method for Ingress PDH (PSN->TDM) clock generation is implemented to support E1 (ITU-T G.823) Jitter performance.

IPM-E1/4E1 provides cost-effective applications of traditional circuit-switched system over IP. It is easy to interconnect existing phone systems over IP that are used to carry data, voice and video. With high precision clock recovery technology, IPM-E1/4E1 is capable of supporting 2G/3G/4G backhaul and provides smooth services. IPM-E1/4E1 can transparently transport proprietary signaling that are required to support PBX features, including call conference, call forwarding and SS7. Customer can easily apply and enjoy better integration of TDM and IP devices with lower network expense. With a pair of IPM-E1/4E1 and guaranteed internet bandwidth, it is sure to save cost dramatically, and to ensure the QoS of voice based on interconnections of TDM equipment.

## Features

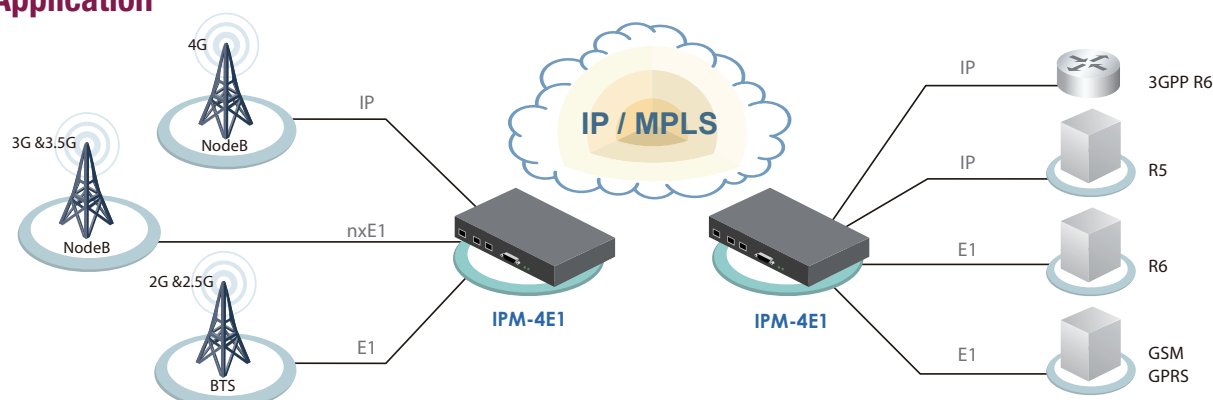
- Supports Web Management
- Supports IETF RFC4553 Structure-Agnostic TDM over Packet (SAToP), Metro Ethernet Forum MEF8
- Use Raw Encapsulation method for PDH payload over Ethernet packet
- Supports Circuit Emulation Service over Ethernet networks
- Comply with IETF draft standard for CESoPSN and SAToP; Metro Ethernet Forum MEF8 IA
- Supports both Point-to-Point and Point-to-Multipoint operation
- Supports Adaptive Clock recovery block for Ingress PDH (PSN -> TDM) clock generation. Recovered clock jitter is compliant to ITU-T G.823 (E1 Jitter Control)
- Configurable jitter buffer depth to compensate PDV (Packet Delay Variation) with the flexible setting of 11ms, 23ms, 40ms, 75 ms
- Lost packets processing / compensation via PW (Pseudo Wire) control field Sequence Number
- Provide Subscriber side Data traffic bandwidth control to guarantee enough TDM payload bandwidth
- PDH LOS detection triggered PW L field or payload AIS generation at Egress direction (TDM->PSN)
- Configurable IEEE 802.3 DA/SA assignment
- LED alarm display for E1 Power failure status
- E1 NRZ Serial Interface with LOS/AIS detection

## Specifications

|                           |             |                                  |
|---------------------------|-------------|----------------------------------|
| <b>E1 Interface</b>       | Standards   | ITU-T G.703, G.704, G.706, G.732 |
|                           | Ports       | 1 or 4-Port                      |
|                           | Data Rate   | 2.048Mbps $\pm$ 50ppm            |
|                           | Connector   | RJ-48c for 120 ohm               |
|                           | Line Coding | HDB3                             |
| <b>Ethernet Interface</b> | WAN Port    | 100 Base-TX Ethernet             |
|                           | Interface   | RJ-45                            |
|                           | LAN port    | 100 Bases-TX Ethernet            |
|                           | Interface   | RJ-45                            |

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| <b>Dimensions</b>  | 125 x 320 x 44 mm (D x W x H)                            |
| <b>Power</b>       | AC: 85 ~ 264V @ 47 ~ 63Hz                                |
|                    | DC: -72V ~ -36V                                          |
| <b>Environment</b> | Ambient temperature: 0° ~ 50°                            |
|                    | Storage temperature: 0° ~ 85°                            |
|                    | Humidity: 5 ~ 95% non-condensing                         |
| <b>Management</b>  | Console or Telnet / Web / SNMP management (via Ethernet) |

## Application



## Ordering Information

| Model Name | Description                                   |
|------------|-----------------------------------------------|
| IPM-E1-AD  | E1 over Ethernet with built-in AC+DC Power    |
| IPM-4E1-AD | 4x E1 over Ethernet with built-in AC+DC Power |

Port Number Power Type  
**IPM - □□□ - □□**  
 Example: IPM - 4E1 - AD