

H0FL-EthMux P16 E1/T1 over Ethernet Multiplexer (TDM over IP)



Product Overview:

As a cost effective solution for the traditional telecom services migrate to the IP packet networking technology, H0FL-EthMux P16 adopts the innovative TDM over IP technology, with IP circuit emulation that supports transportation of 8~16 E1s and 5 GE electrical ports and 1 GE optical port. 2 uplink electrical Ethernet ports can provide power(55V, DC) for remote devices. The uplink ports and user data ports are IEEE 802.3 compliant, 10/100/1000M auto-sensed Ethernet ports.

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.

H0FL-EthMux P16 could work together with other members in H0FL-Ethmux family such as EthMux V16, EthMux V8, EthMux V804, EthMux V802, EthMux V801 etc. to run legacy E1 services. Telecom and Enterprise users can save a lot of access and equipment costs and generates new revenue by offering different types of services over their packet-switched infrastructure. It is also suitable for connecting to the wireless equipment to achieve fast deployment of E1/T1 services. One particular application is to build E1/T1 links with low cost Wireless LAN bridges, replacing much more costly microwave radios. Operators can use H0FL-EthMux to provide legacy TDM services over wired or wireless Ethernet/IP network.

Features

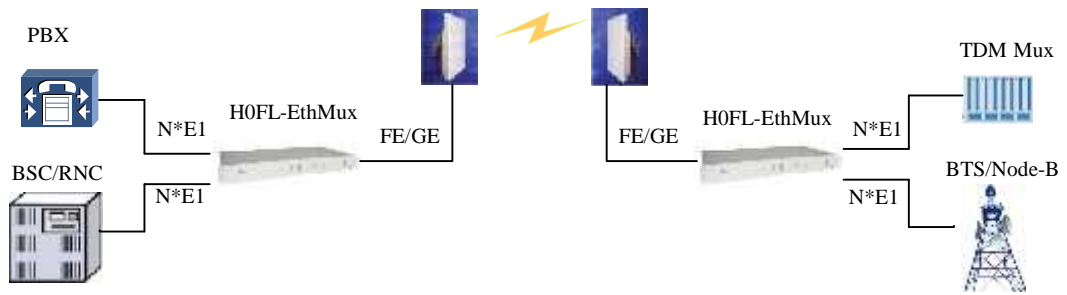
1. Provide 5 GE electrical ports and 1 GE optical port, 6 GE ports serve as network uplinks or users ports.
2. 2 uplink electrical Ethernet ports can provide power(55V, DC) for remote devices (**Power Over Ethernet**)
3. Support Ethernet uplink port 1+1 protection
4. User-friendly Web server supported for easy setup and maintenance, alarm log provided
5. Support SNMP V1/V2 network management
6. Ethernet built-in layer 2 switch, support VLAN, comply with IEEE 802.3x, 802.1P
7. Provide two pluggable E1 cards, each card supports 8 E1/T1s
8. Point to point and point to multipoint supported
9. Stable E1/T1 clock recovery, low jitter and wander
10. Low processing delay for E1 channels, high bandwidth usage efficiency
11. Resist to packet loss, with PCM frame synchronization protection

12. User definable encapsulation packet size for different application
13. Support Ethernet encapsulation and UDP/IP protocol encapsulation.
14. Support VLAN settings for E1 service and in band VLAN management.
15. Enough jitter buffer to resist packet delay variation (PDV)
16. Local Ethernet port throughput limiting, assuring E1 QoS
17. 120 Ω balanced E1/T1 port, RJ-45 connector, support 75 Ω unbalanced port through outside converting cable.
18. Support cascade concatenate for more than 16 E1 ports
19. Software and hardware online upgrade
20. Power supply redundancy
21. POE power supply supported by power module with 220V AC input and 55V DC output.

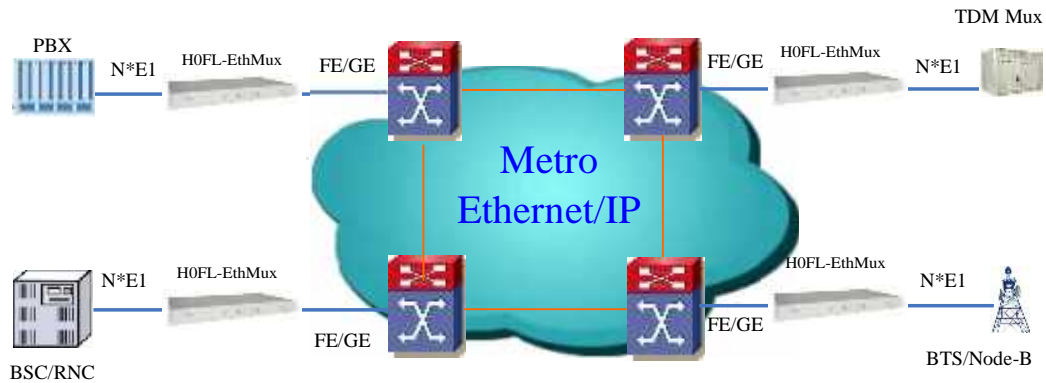
Technical Specifications

| Item | Description | |
|---------------------|-------------------|--|
| Model | HOFL-EthMux P16 | 5 GE electrical ports and 1 GE optical port, 16 E1s |
| Interfaces | IP ports | 5 GE electrical ports and 1 GE optical port Comply with IEEE 802.3, 802.1Q, 802.1P Speed and duplex auto-negotiation or manual |
| | E1 Ports | 16 E1 Ports Supported Comply with G.703 Impedance: E1-120 Ω or 75 Ω |
| | T1 Ports | 16 T1 Ports Supported Comply with G.703 Impedance: 100 Ω |
| NM port | Same as IP ports | Web server and SNMP management supported |
| Power | Supply | Pluggable dual power supply |
| | | 2DC or 2AC or DC+AC |
| | | -48V~-72VDC or 100~240VAC |
| | Consumption | 15W |
| Working Environment | Temperature | 0~ 50°C |
| | Relative Humidity | 90% (non-condensing) |
| Dimension | W x H x D (mm): | 440 x 44 x 231 |

Typical Application



(A) Typical Application in Wireless Network



(B) Typical Application in Wired Network

Interoperability Table with Wireless Bridges

| LOGO | Manufacturer | Country of Origin | Model |
|---|------------------|-------------------|---|
|  | MOTOROLA | USA | PTP100 Series, PTP200 Series, PTP300 Series, PTP400 Series, PTP 500 Series, PTP600 Series |
| | Alvarion | Israel | BreezeNET B Series B10, B14, B28, B100, B300, BreezeNET DS.11 etc |
| | Proxim | USA | Tsunami™ QB-8100 Series and QuickBridge Series |
|  | Infinet Wireless | Russia | InfiLink, InfiLink 2x2 etc |
|  | Firepro Wireless | India | LR1R-H1, LR1R, SR series |

Note: More wireless bridges are supported