

H0FL-EthMux V16 E1 + 5 GE over Ethernet Multiplexer



Brief Introduction

As a cost effective solution for the traditional telecom services migrate to the IP packet networking technology, H0FL-EthMux V16 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. 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 V16 could work together with other members in H0FL-Ethmux family such as 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.

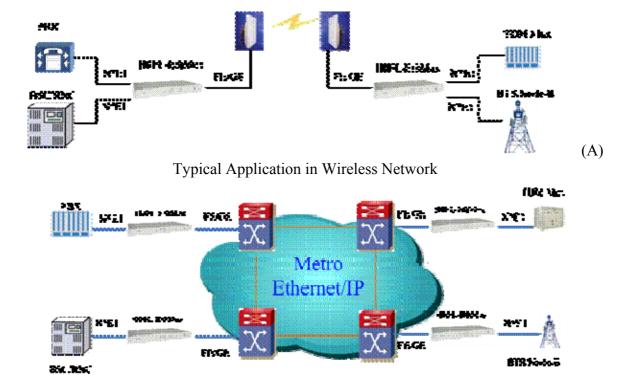
Features

- 1. Provide 5 GE electrical ports and 1 GE optical port, 6 GE ports serve as network uplinks or users ports, Anyone of 5 GE electrical ports may act as NM port
- 2. Support Ethernet spanning tree protocol which enable normal work and protection in ring and mesh topology, protection resume in short time
- 3. User-friendly Web server supported for easy setup and maintenance, alarm log provided
- 4. Support SNMP V1/V2 network management
- 5. Ethernet built-in layer 2 switch, support VLAN, comply with IEEE 802.3x, 802.1P
- 6. Provide two pluggable E1 cards, each card supports 8 E1/T1s
- 7. Point to point and point to multipoint supported
- 8. Stable E1 clock recovery, low jitter and wander
- 9. Low processing delay for E1 channels, high bandwidth usage efficiency
- 10. Resist to packet loss, with PCM frame synchronization protection
- 11. User definable encapsulation packet size for different application
- 12. Support Ethernet encapsulation and UDP/IP protocol encapsulation.
- 13. Support VLAN settings for E1 service and in band VLAN management.
- 14. Enough jitter buffer to resist packet delay variation (PDV)
- 15. Local Ethernet port throughput limiting, assuring E1 QoS
- 16. 120Ω balanced E1/T1 port, RJ-45 connector, support 75Ω unbalanced port through outside converting cable.
- 17. Support cascade concatenate for more than 16 E1 ports
- 18. Software and hardware online upgrade
- 19. Power supply redundancy
- 20 POE power supply supported by power module with 220V AC input and 55V DC output.

Technical Specifications

| Item | Description | | | |
|------------------------|-------------------|---|--|--|
| Model | H0FL-EthMux V16 | 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 | | |
| 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



(B) Typical Application in Wired Network

Interoperability Table with Wireless Bridges

| LOGO | Manufacturer | Place | Model |
|--|------------------|--------|--|
| MOTOROLA intelligence everywhere CANOPY Motorola Wireless Internet Platform | MOTOROLA | USA | CANOPY PTP600, 500, 400, 300, 100 Series (Formerly Canopy 10/20M, 30/60M, 150/300M Backhaul Modules). |
| alvarion We're on your wavelength. | Alvarion | Israel | BreezeNET Series B100, DS.11 etc, BreezeAccess Series LB etc |
| Provin | Proxim | USA | Tsunami™ QuickBridge series, Tsunami™ MP.11 Series |
| InfiNet | Infinet Wireless | Russia | SkyMan NG |
| firepro | Firepro Wireless | India | Firepro Wireless all series |

Note: The series TDM over IP products have excellent interoperability which could work with most of prevailing wireless bridges. More wireless bridges are not listed since space is limited.