

V-EMUX-16

16* E1/T1 TDM Over IP Multiplexer



Product Overview

As a cost effective solution for the traditional telecom services migrate to the IP packet networking technology, V-EMUX-16 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.

V-EMUX-16 could work together with other members in V-EMUX-16 family such as EMUX-8, EMUX-4, EMUX-2, EMUX-1 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 V-EMUX 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.

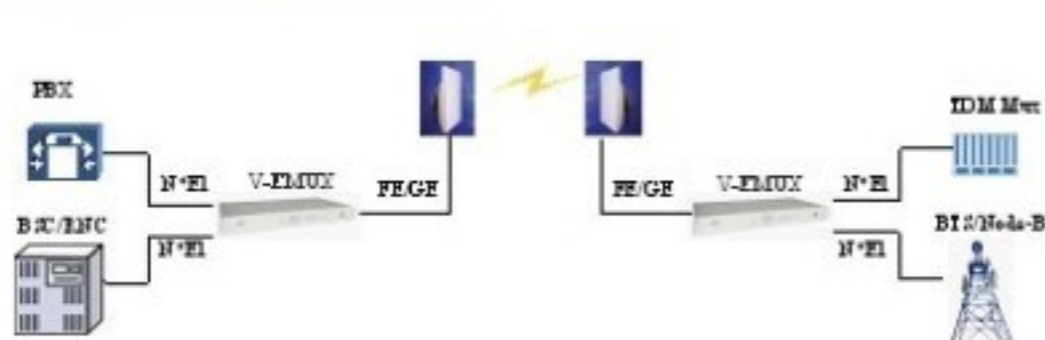
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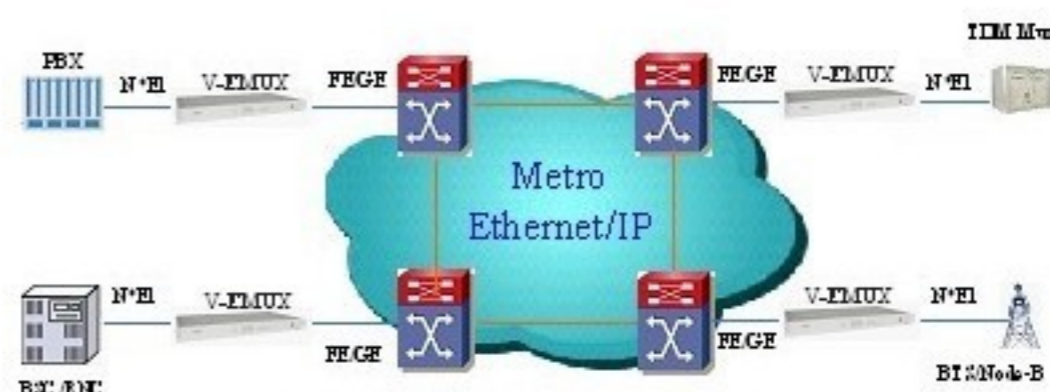
Technical Specifications

Item	Description	
Model	V-EMUX-16	5 GE electrical ports and 1 GE optical port, 16 E1s/T1s
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: E1-120Ω or 75Ω
	T1 Ports	16 T1 Ports Supported Comply with ANSI T1.403-1999, ANSI T1.408, AT&T TR62411; Impedance: T1-100Ω balanced
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	Place	Model
	MOTOROLA	USA	CANOPY PTP600, 500, 400, 300, 100 Series (Formerly Canopy 10/20M, 30/60M, 150/300M Backhaul Modules).
			
	Alvarion	Israel	BreezeNET Series B100, DS.11 etc, BreezeAccess Series LB etc
	Proxim	USA	Tsunami™ QuickBridge series, Tsunami™ MR.11 Series
	Infinet Wireless	Russia	SkyMan NG
	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.