

# WIBORNE, INC.

## MULTIPLEXER SOLUTION SERIES

### *ETHERMux-VFXO/VFXS-1/2/4 E1 OVER IP*

### *Evolutionary Convergence in Transmission of Traditional Voice and Data over Ethernet Network*



#### PRODUCT OVERVIEW

EtherMux-VFXO/VFXS is designed as a multi-service access platform for E1 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.

#### ***COST-EFFECTIVE LAN DEPLOYMENT (PDH OVER ETHERNET)***

EtherMux series provides cost-effective applications of traditional circuit-switched system over IP. With EtherMux, it is easy to interconnect with the existing E1 systems over IP that are used to carry data, voice and video.

#### ***TRANSPARENT TRANSMISSION***

EtherMux can transparently transport proprietary signaling that is required to support PABX & IP-PABX features, including call conference, call forwarding and SS7. Customer can easily apply and enjoy better integration of TDM and Ethernet devices with lower network expense.

#### ***BYPASS INTERNATIONAL TOLL***

With a pair of EtherMux and guaranteed internet bandwidth, it is sure to save cost dramatically, and to ensure the QoS of voice based on interconnections of TDM telecommunications equipment.

#### FEATURES

- Support IETF RFC4533 Structure-Agnostic TDM over Packet (SAToP), Metro Ethernet Forum MEF8.
- E1 NRZ Serial Interface with LOS/AIS detection.
- Use Raw Encapsulation method for PDH payload over Ethernet packet.
- Support Circuit Emulation Service over Ethernet networks.
- Comply with IETF draft standard for CESoPSN and SAToP; Metro Ethernet Forum MEF8 IA.
- Support both Point-to-Point and Point-to-Multipoint operation.
- Support 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

#### SPECIFICATION

##### ***LINE INTERFACE***

Port: up to 4 x E1 (ITU-T G.703)  
Interface: RJ-48c (120 Ohm)  
Line Coding: HDB3

Voice Ports: 4 x FXO or 4 x FXS  
Interface: RJ-45

##### ***ETHERNET INTERFACE***

WAN Port: 100 Base-TX Ethernet  
Interface: RJ-45

LAN port: 100 Bases-TX Ethernet  
Interface: RJ-45

##### ***DIMENSION***

H x W x D: 44 x 320 x 125(mm)

##### ***MAIN POWER SUPPLY***

AC: 85 ~ 264V @ 47 ~ 63Hz  
(Optional) DC: -72V ~ -36V

##### ***ENVIRONMENT CONDITION***

Ambient temperature: 0°C ~ 50°C  
Storage temperature: 0°C ~ 85°C  
Relative humidity: 5 ~ 95% none condensing

##### ***CONFIGURATION AND MANAGEMENT***

RS-232 console port (Craft Terminal) or Telnet/SNMP-based management (via Ethernet)

#### ORDERING INFORMATION

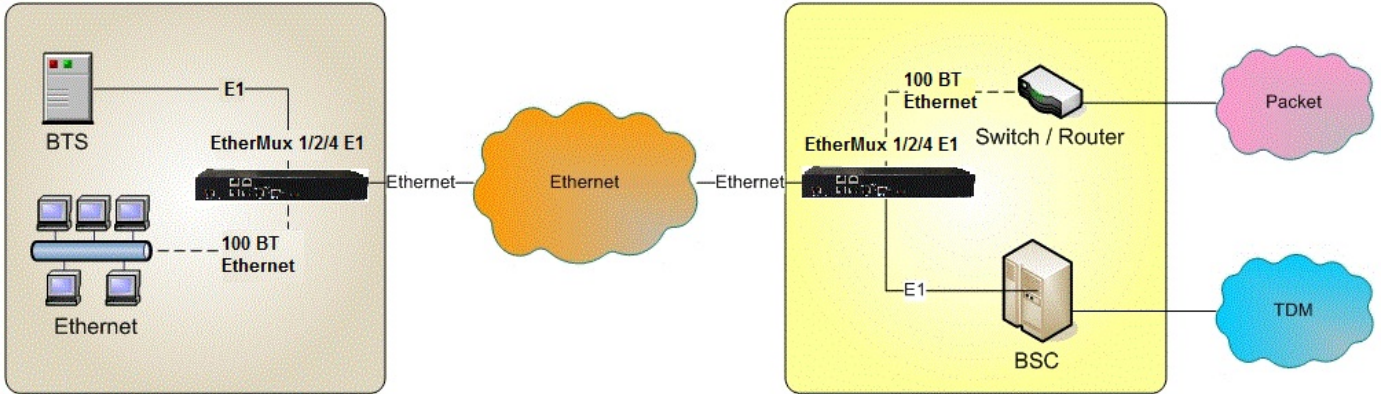
##### **Feature Options:**

[ **Line Interface** ]  1x E1  2x E1  4x E1  4x FXO  4x FXS

[ **Management** ]  Craft terminal  Craft terminal + SNMP-based management

[ **Power** ]  1x AC  1x DC  1x AC+ 1x DC

## ETHERMUX-1/2/4E1 APPLICATION-1



## ETHERMUX-1/2/4E1 APPLICATION-2

