

IPmux-1E

TDM Pseudowire Access Gateway

TDM IP
Driven®



Compact TDMoIP gateway for customer premises

RAD's IPmux-1E gateway reduces operating expenses by delivering virtually all TDM, data and LAN services over IP/Ethernet/MPLS networks, while ensuring Strict Priority for the TDMoIP traffic over the network link. End users continue to receive all familiar services, while carriers and service providers maintain revenues from legacy services. The compact size, ease of installation and support for multiple legacy and next-generation Ethernet and IP-based services make it ideal for small and medium-sized enterprises (SMEs).

Ethernet QoS capabilities

IPmux-1E answers the growing need of business customers for transparent LAN services, such as LAN-to-LAN interconnection and Ethernet connectivity to service providers. Enhanced QoS capabilities enable adaption of bandwidth to the transport media. Users can configure the ToS or DiffServ values of outgoing TDMoIP packets, to ensure they receive the required priority by network switches and routers. In addition, TDMoIP frames are assigned dedicated VLAN ID tags to separate user and management traffic and to filter user traffic.

TDM circuit extension

The TDMoIP gateway can connect to any user device with a standard E1/T1 interface. It also offers connectivity for four ISDN BRI S0 channels or four analog voice channels, with optional near-end echo cancellation (up to a full E1/T1) for cases where a large end-to-end delay causes echoes, such as in satellite applications. This device supports alarm detection and insertion along with error statistics, SES/UAS statistics, LOS/AIS physical layer alarms, and remote/Local Loop tests. It supports standard E1/T1 alarms from end to end.

Interfaces

IPmux-1E is equipped with the following interfaces:

- TDM user port options:
 - Single standard E1/T1 port with echo canceller
 - Four analog (FXS/FXO/E&M) ports with optional echo canceller
 - Four ISDN BRI S0 ports
- One Ethernet uplink with 10/100BaseT or 100BaseFX interface
- Optional Ethernet user port with 10/100BaseT interface for LAN connectivity

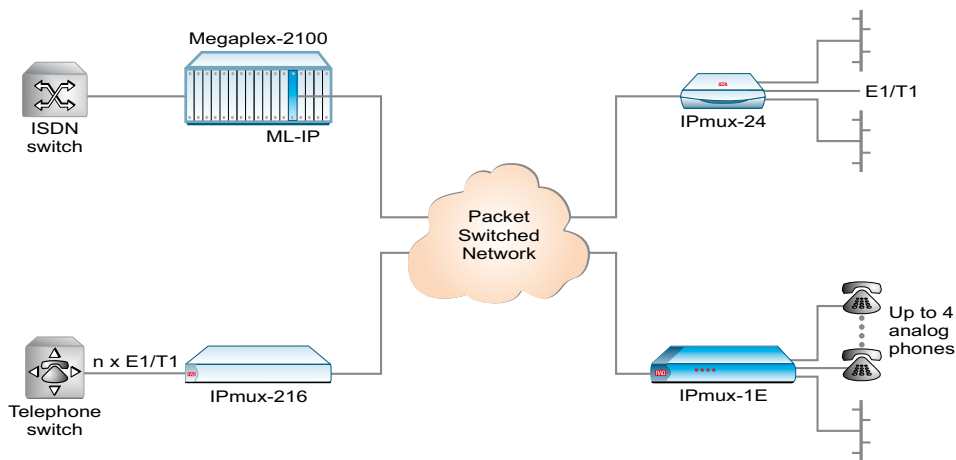
- Transmits TDM-based services over Ethernet, IP or MPLS networks
- Analog, ISDN BRI and E1/T1 user ports with echo cancellation
- Transparent LAN bridging over packet switched networks
- Fiber and copper Fast Ethernet uplink interfaces
- QoS support

For latest updates visit www.rad.com

Service center management

The IPmux-1E features flexible management capabilities, including local management via an ASCII terminal (RS-232). In addition, remote management can be performed either inband or out-of-band, using the network or user ports, while maintaining separation between management and user traffic via the use of VLANs. Advanced FCAPS (Fault, Configuration, Administration, Performance, Security), service provisioning and diagnostic tools are provided by RADview-SC/TDMoIP, RAD's network management system, via an SNMP-based GUI.

The IPmux-1E also supports a variety of access protocols, including Telnet, SNMP, Web server, and TFTP.



Analog extension over a packet-switched network, grooming the traffic to n x E1/T1 at the central office

