

Router Module



IP/IPX Routing for TSU Multiplexers

Product Features

- IP and IPX routing
- Routing over Frame Relay
- Full MAC bridging and spanning tree filtering
- 10BaseT Ethernet interface
- DHCP, PPP and NAT
- Firewall protection using IP filtering
- Embedded SNMP, Telnet and T-Watch PRO™ support through Ethernet or PVC
- Built-in control port for SLIP and VT100 access
- Support from 56k to 1.536 Mbps in 56k or 64k increments
- Easy configuration from TSU front panel, SNMP, Telnet or VT100 terminal
- Standard five-year warranty

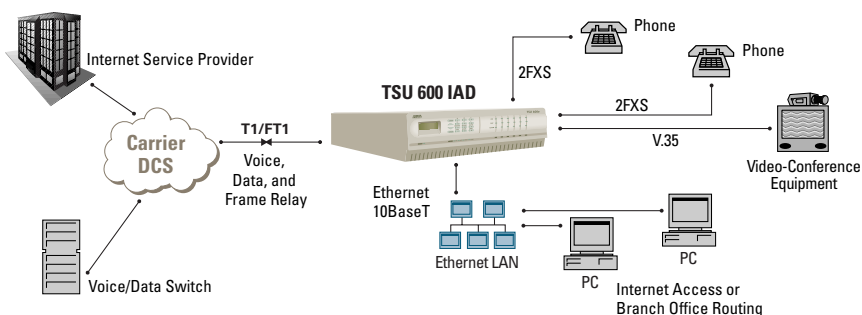
The ADTRAN Router module is an expansion module for the TSU Multiplexer family.

This module forms the basis for a powerful and flexible solution for integrated voice and data access. For complete and scalable integrated access solutions using T1 networks, the ADTRAN TSU Router module provides branch office routing capability in the TSU Multiplexer family.

Supporting both IP and IPX routing, the Router module provides an interface for Internet access or small office or branch office connectivity. In addition to routing, the module also supports full MAC bridging and spanning tree filtering, providing solutions for point-to-point networks connected via T1 networks. Easy connectivity via the module's 10BaseT interface makes LAN integration simple and straight forward. The Router module supports from 56k to 1.536 Mbps in 56k or 64k increments. For security, the module incorporates IP filtering for access to the LAN, in addition to NAT protocol for IP address translation.

The Router module offers a powerful solution when used in conjunction with additional voice and data modules available for the TSU Multiplexer family. Interfaces for analog voice, digital voice, subrate data, high-speed data, Basic Rate ISDN extension and 64k extension can be used in the same chassis with the router, without a change in software or hardware. The TSU Multiplexer provides T1 network termination and channel assignment to all modules used for customer applications. This powerful combination of modularity and flexibility is unprecedented in the industry, and benefits both the end user seeking to consolidate costs, as well as the service provider seeking to consolidate services.

The ADTRAN TSU Multiplexer and the Router module are both backed by a five-year, return-to-ADTRAN warranty. With the Router module being one of more than 30 modules available, ADTRAN TSU Multiplexer is the T1 integrated access solution of choice.





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IP/IPX Routing for TSU Multiplexers

Product Specifications

Routing

- IP and IPX

Bridging

- IEEE 802.1D MAC bridging and spanning tree filtering

Protocol Support

- **IP:** TCP, UDP, RIP (v1 & v2), ICMP, DHCP, ARP, UDP relay
- **IPX:** IPX, RIP and SAP
- **PPP:** LCP, IPCP, BCP, IPXCP
- DHCP for IP address assignment
- NAT

Frame Relay

- RFC 1490 encapsulation
- LMI
- ANSI T1.617 Annex D
- ITU Q.933 Annex A

Filtering and Security

- IP filtering and IPX filtering
- Pattern filtering
- Bridging filter
- PAP, CHAP, and EAP
- Password protection

Diagnostics

- PING
- Flash upgrade
- Router performance statistics

SNMP and Configuration

- VT100 terminal interface
- T-Watch PRO™
- Embedded SNMP
- Telnet
- Front panel (from TSU MUX)
- Inband via T1 FDL or 8k data channel
- Inband via network PVC or management PVC

Agency Approvals

- FCC Part 15, Class A
- UL 1950 and CUL

IQ Frame Relay Statistics PVC Statistics

- Frames and bytes in/out
- BECN and FECN counts
- DE and C/R frames
- Max/Min/Avg frame size
- Throughput/bandwidth utilization
- Max/Min/Avg delay

Port Statistics

- Frame/byte count
- Bandwidth utilization
- CRC frames and errors
- Abort/errored frames
- Utilization by PVC

LMI Statistics

- LMI state
- Polls/responses in
- Timeouts
- Status polls/response
- Polls with protocol error

Agency Approvals

- FCC Part 15, Class A
- CISPR 22, Class A
- Industry Canada CS03
- UL 1950, CUL and IEC 950

Environment

Operating Temperature

- 0° to 50°C, (32° to 122°F)

Storage Temperature

- -20° to 70°C, (-4° to 158°F)

Relative Humidity

- Up to 95%, non-condensing

Physical

- **Standard TSU Expansion Module Form Factor:**
Plug-in (accepts most plug-ons)
- **Weight:** 1.5 lbs

Product Includes

- One 8-pin to 8-pin modular cable
- Modular to female DB-25 adapter
- User manual.

Ordering Information

Equipment	Part #
Router Module	1200350L1

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