FSU

Frame Relay Access

FEATURES

- **Network Connection via optional 56/64 DDS DSU/CSU or external DDS or FT1 DSU/CSU**
- **SNMP/Telnet Management**
- **RFC 1490 encapsulation for IP and LLC2**
- **SDLC local port spoofing**
- **IP support using SLIP, PPP-async, PPP-sync, with routing**
- **Frame relay concentrator mode which allows two frame relay devices to utilize a single network interface**
- **Prioritization scheme which ensures proper SNA response times in mixed protocol environment**
- **Frame relay management using ANSI, ITU, or LMI formats**
- **Easy to use VT 100 interface for configuration**
- **Standard 5 year warranty**

The ADTRAN FSU is a stand-alone frame relay access device (FRAD) that provides a cost-effective means of transporting multi-protocol data over frame relay networks. The ADTRAN FSU provides an easy-to-use interface for customers migrating existing services or developing new applications for operation over frame relay networks.

The FSU provides two independent DTE interfaces for connecting non-frame relay devices to the frame relay network. The DTE ports support synchronous data rates from 2.4 to 512 kbps and asynchronous from 2.4 to 38.4 kbps. Both EIA-232 and V.35 physical interfaces are available for connection to the customer's DTE equipment. The FSU's concentrator feature allows the connection of two frame relay devices to a single frame relay network interface.

The FSU may be purchased with an integral 56/64 DDS DSU/CSU or an external DSU/CSU may be connected to the DCE interface. Network speeds up to 512 kbps and both EIA-232 and V.35 physical interfaces are supported through the DCE port.

The FSU supports SNA, SDLC, Bisync, SLIP, IP, PPP (both synchronous and asynchronous), frame relay, BOP, and asynchronous protocols. The DTE ports can be configured independently, providing support for multi-protocol applications.

Embedded SNMP and Telnet are available in-band. SNMP is provided with support for RFC 1315 and MIB II. Through the Management Information Base (MIB)-II standard and an ADTRAN-supplied enterprise MIB, the FSU can be configured, monitored, and diagnosed using standard SNMP network management programs such as HP OpenView®, NetView®, and SunNet Manager®.

Complete control, configuration, and diagnosis are available through a 16-position keypad and a two-line by 16-character LCD display. A VT100 terminal configuration and control mode is also available through the control port. Flash download capability is implemented for installation of new features and enhancements.

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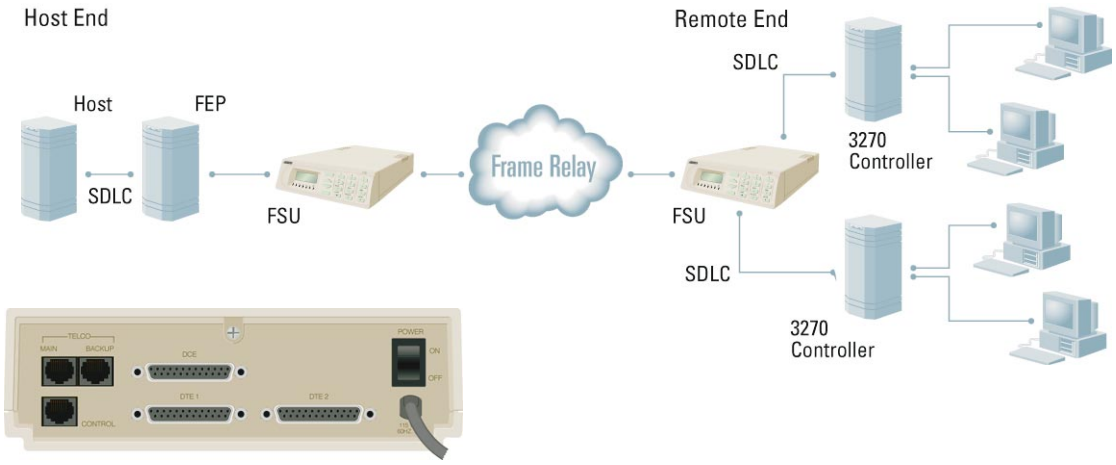

Product Specifications

Operating Modes

- Frame Relay utilizing DDS or FT1 circuits

DTE & DCE Rates Provided

- DTE: Synchronous rates: 2.4 to 512 kbps
  Asynchronous rates: 2.4 to 38.4 kbps
- DCE: Synchronous rates 2.4 to 512 kbps

DTE & DCE Interfaces

- EIA-232 electrical and physical interfaces
- V.35 electrical, physical with adapter cable

Control Port Interface

- Electrical: EIA-232
- Physical: RJ-48S (female DB25 adapter provided)
- Data Rates: Async 2.4 to 38.4 kbps

SNMP

- Internal SNMP agent
- MIB II RFC 1213
- Frame Relay DTE MIB RFC 1315
- ADTRAN enterprise MIB
- Telnet Access

Protocol Support

Concentrator

- Frame Relay

IBM Support

- SNA/SDLC with local spoofing
- SDLC/HDLC transparent
- SDLC-LLC2 translation
- Supports up to 20 SDLC PUs on each DTE port

LAN Protocol

- SLIP
- IP-PPP asynchronous or synchronous

Transparent

- Asynchronous transparent
- BOP transparent

Protocol Encapsulation

- IP (SLIP and PPP) and LLC2 protocols are encapsulated using RFC 1490 formats
- All other protocols use proprietary formats and require ADTRAN devices at each UNI

Data Flow Control

- Synchronous: Clock slowing
- Asynchronous: CTS or XON/XOFF

Diagnostics

- CSU and DSU loopbacks
- IP Ping Mode

Optional 56/64 DDS DSU/CSU Specifications

- Network Data Rates: Dedicated 56 and 64 kbps
- Loop transmission parameters as defined in AT&T PUB 62310: Dedicated DDS
- Line Interface: RJ-48S, 4-wire, full duplex
- Receiver Sensitivity: -45 dB at all rates

Agency Approval

- FCC part 15, Class A and Part 68
- Industry Canada CS03
- UL and CUL

Environment

- Operating: 0° to 50°C (32° to 122°F)
- Storage: -20° to 70°C (-4° to 158°F)
- Relative Humidity: Up to 95%, non-condensing

Physical

- Dimensions: 10.4”D x 8.0”W x 2.4”H
- Weight: 4.5 lbs.
- Power: 115 VAC, 60 HZ, 7 W

Ordering Information

EQUIPMENT	PART #
FSU	1200130L1
FSU w/56/64k DSU/CSU	1200130L2
V.35 Adapter Cable Male 6ft.	1200193L1
V.35 Adapter Cable Female 6ft.	1200194L1

Product Includes: two 8-pin to 8-pin modular cables, modular to female DB-25 adapter & User Manual

Specifications subject to change without notice.

ADTRAN

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