



# Express 5200 Series

## Voice and Data Frame Relay Remote Devices

### Product Features

- Two unit series supports voice and data over Frame Relay or point-to-point networks
- Voice options include FXS, FXO, and E&M
- Integral 56/64k DSU/CSU
- Express 5200 supports two serial data ports
- Express 5210 supports one serial and one 10Base-T data port
- RFC 1490 encapsulation for IP & LLC2
- SDLC local port spoofing
- Dial backup options include 4-wire Switched 56, V.34, and ISDN
- Time of day and weekend dial backup lockout options
- Supports IQ Frame Relay performance monitoring
- Easy-to-use VT100 interface for configuration
- Industry-leading five-year North American warranty

**The ADTRAN Express 5200® is a family of Frame Relay access devices that provide a cost-effective means of transporting voice and multi-protocol data over Frame Relay and point-to-point networks.** For customers looking for disaster recovery solutions, the units provide optional dial backup.

The Express 5200 Series is an economical means of providing high-quality voice and fax capabilities to remote locations without expensive toll charges. Voice options are supported through plug-in voice cards. Voice and data can share the same Permanent Virtual Circuit (PVC) eliminating unnecessary PVC charges.

The Express 5200 provides multi-protocol support through two serial interfaces that can support EIA-232 and V.35 operating at rates from 2.4k to 512k. The series supports SNA, SDLC, 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. The Express 5210® provides the same multi-protocol support through a single serial interface but also includes an integrated 10Base-T Ethernet port that supports full IP routing.

The Dial Backup (DBU) feature allows automatic or manual backup upon interruption of Frame Relay or DDS services. The addition of DBU is accomplished through plug-in cards: 4-wire Switched 56, V.34 modem, and 1B+D

ISDN. The units monitor both the physical link and the Frame Relay signaling to determine if an interruption has occurred. Once detected, the host unit initiates a dial-up call around the Frame Relay network and merges backup traffic, with the primary traffic still being received from unaffected remote sites. The DTE device still receives all data as Frame Relay traffic, allowing a transparent backup transition. Once the failed condition has been cleared and the Frame Relay interruption is over, the unit automatically restores traffic to the primary link.

In addition to voice and dial backup, the Express 5210 also supports IQ™ Frame Relay performance monitoring. This includes statistics on throughput and utilization per port and PVC; availability; lost frames and PVC state; excess bursting above CIR; network congestion (FECN, BECN, and DE); and end-to-end delay on any or all PVCs.

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



#### ADTRAN, Inc.

Attn: Enterprise Networks  
901 Explorer Boulevard  
Huntsville, AL 35806

P.O. Box 140000  
Huntsville, AL 35814-4000

256 963-8000 voice  
256 963-8699 fax  
256 963-8200 fax back

#### General Information

800 9ADTRAN  
info@adtran.com  
www.adtran.com

#### Pre-Sales

#### Technical Support

800 615-1176 toll-free  
application.engineer@adtran.com  
www.adtran.com/support

#### Where to Buy

877 280-8416 toll-free  
channel.sales@adtran.com  
www.adtran.com/where2buy

#### Post-Sales

#### Technical Support

888 423-8726  
support@adtran.com  
www.adtran.com/support

#### ACES Installation & Maintenance Service

888 874-ACES  
aces@adtran.com  
www.adtran.com/support

#### International Inquiries

256 963 8000 voice  
256 963-6300 fax  
international@adtran.com  
www.adtran.com/international

#### For the regional office nearest you, visit:

www.adtran.com/where2buy



ADTRAN is an  
ISO 9001: 2000 certified supplier.



ADTRAN is a  
TL 9000 3.0 certified supplier.

61202175L1-8D September 2003  
Copyright © 2004 ADTRAN, Inc.  
All rights reserved.

# Express 5200 Series

## Voice & Data Frame Relay Remote Devices

## Product Specifications

### WAN Interface

#### Built In DSU/CSU

- DDS (RJ-48S)
- Data Rates: 56 and 64 kbps

#### With External DCE Card

- Data Rates: Up to 512 kbps
- EIA-232 (DB-25)
- V.35 with adapter cable

### DTE Interfaces

- Asynchronous Rates: 2.4 to 57.6 kbps
- Synchronous Rates: 2.4 to 512 kbps
- EIA-232 (DB-25)
- V.35 with adapter cable

### Network Interface

- 10 Mbps 10Base-T Ethernet (RJ-45)

### Voice Support

#### Compression

- G.723.1 (MP-MLQ)
- Netcoder
- Silence suppression
- 6.3 - 9.6k compressed voice
- MOS-3.9

#### FAX Support

- Group III 0.3-14.4 kbps

#### Dual/Quad FXS

- Loop Start 2-wire voice
- Line current and ring voltage supplied
- R.E.N. - 3
- TIA 464A DTMF decode and regeneration
- G.165 echo cancellation

#### Dual FXO

- Loop start 2-wire voice

#### Dual E&M

- 2- or 4-wire
- Type I and II E&M signaling

### Protocol Support

#### Concentrator

- Frame Relay

#### IBM Support

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

#### Routed Protocols

- IP

#### Routing Support Protocols

- RIP versions 1 and 2
- ARP
- ICMP
- IARP

### IP Datalink Layer Protocols

- SLIP
- PPP asynchronous
- PPP synchronous

### Transparent

- Asynchronous transparent
- BOP transparent

### Protocol Encapsulation

- IP and LLC2 using FRF 3.1
- All other protocols use proprietary formats and require ADTRAN devices at each UNI

### Configuration and Administration

- Local RS-232 Craft Interface
- Telnet
- Remote config
- Built in Ping Utility
- PVC Loopbacks
- DSU and CSU Loopbacks

### Agency Approvals

- Emissions: Part 15 Class A
- Safety: UL 1950, CUL
- Telecom: FCC Part 68, Industry Canada CS-03

### 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: 2.4" H, 8.0" W, 10.4" D
- Weight: 4.5 lbs
- Power: 115 VAC, 60 Hz, 10 watts

### Product Includes

- Express 52xx
- DDS network cable
- RJ to DB-25 adapter and cable for control port
- Users manual

## Ordering Information

Equipment	Part #
Express 5200	1202175L1
Express 5210	1200208L1
Dual FXS Card	1202188L1
Dual FXO Card	1202187L1
Dual E&M Card	1202189L1
Quad FXS Card	1200653L1
4-Wire Switched 56 DBU Card	1204001L1
V.34 DBU Card	1204002L1
ISDN DBU Card	1204004L1
V.35 Adapter Cable Male (6')	1200193L1
V.35 Adapter Cable Female (6')	1200194L1



Express 5200 Backplane

Specifications subject to change without notice. IQ is a trademark of ADTRAN, Inc. ADTRAN and Express 5210 are registered trademarks of ADTRAN, Inc. All registered trademarks and trademarks mentioned in this publication are the property of their respective owners.