



# DSU III AR

## All-Rate DSU/CSU

### Product Features

- Support for rates from 2.4 to 64 kbps including 19.2 and 38.4 kbps
- Standalone or Smart 16/16e shelf rackmount versions
- Compatible with DDS secondary channel services; provides asynchronous secondary channel rates of 75 bps to 2.4 kbps
- Local and remote configuration (AT, front panel, V.25 bis)
- Synchronous or asynchronous (including 57.6 kbps) primary channel modes of operation
- Both EIA-232 and V.35 primary channel DTE interfaces
- DTE-to-service rate matching feature allows slower DTE devices to communicate over higher speed service offerings
- Manual, DTR Dial, AT commands, V.25 bis, or stored number dialing capabilities
- Auto answer of incoming calls
- Industry-leading five-year North American warranty

**The ADTRAN® DSU III AR™ is a technologically advanced, high performance data service unit/channel service unit (DSU/CSU).**

This unit provides a reliable interface between the digital data service (DDS) or 4-wire Switched 56 (SW56) network and the customer's data terminal equipment (DTE). The unit is an all-rate DSU/CSU supporting synchronous and asynchronous data rates on the primary channel and asynchronous data rates on the secondary channel. The synchronous primary channel rates supported are 2.4, 4.8, 9.6, 19.2, 38.4, 56, and 64 kbps. Asynchronous data rates supported are 2.4, 4.8, 9.6, 19.2, 38.4 and 57.6 kbps. Secondary channel data rates of 75, 150, 300, 600, 1200, and 2400 bps are offered depending upon the primary channel rate.

The DTE interface can be selected as either EIA-232 or V.35 for all data rates. The secondary channel interface is EIA-232 and is accessed through a separate connector.

Additional features of the DSU III AR include a DTE-to-service rate matching feature for both dedicated and switched modes, as well as various anti-streaming time-out values, to disable streaming terminals on a multi-point circuit. Private networks and modem tail circuits are accommodated through clocking/timing options.

In the 4-wire SW56 mode, dialing options include manual dialing, redialing, and dialing of stored numbers. Dialing over the DTE interface is supported by use of an AT command set or the V.25 bis in-band dialing protocol.

The unit responds to standard loopback commands from the telephone company central office. In addition, the user has several built-in test capabilities. These include V.54 remote loopback, 2047 and 511 BERT test patterns, and four DDS stress patterns (results of which are displayed on a two-line by 16-character LCD display and seven LEDs). The standalone unit's front panel keypad supports setup, selection of test modes, local and remote configuration, manual dialing, or automatic dialing from stored numbers.

The rackmount unit can be configured through the Smart 16/16e shelf controller card, from a local/remote VT100 terminal or from an ADTRAN DATAMATE. The DSU III AR can also be configured using AT or V.25 bis commands. A DC version of the standalone unit is also available. The DSU III AR DC supports all the functionality of the DSU III AR, except secondary channel.



#### 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.

61202011L1-8H March 2003  
Copyright © 2004 ADTRAN, Inc.  
All rights reserved.

# DSU III AR

## All-Rate DSU/CSU

## Product Specifications

### Operating Modes

- Dedicated DDS (point-to-point, multi-point)
- Switched 56 (4-Wire)

### Network Data Rates

- **Dedicated mode service rates:** 2.4, 4.8, 9.6, 19.2, 38.4, 56 and 64 kbps
- **Switched mode service rate:** 56 kbps

### DTE Rates

- DTE-to-loop rate matching in both dedicated and switched modes
- **Synchronous rates**  
2.4, 4.8, 9.6, 19.2, 38.4, 56, and 64 kbps
- **Asynchronous rates**  
2.4, 4.8, 9.6, 19.2, 38.4, and 57.6 kbps

### DTE Interface

- Both EIA-232 and V.35 electrical and physical primary channel DTE interfaces
- EIA-232 secondary channel interface

### Switched Mode Dialing Options

- Stored number
- Front panel keypad (standalone only)
- DTR dialing of stored number
- In-band AT commands
- V.25 bis in-band dialing

### Data Buffering

- Internal slack buffer

### Clocking

- Normal DDS or private network tributary (slaved to network receive clock)
- Private network master (internal)
- Normal DDS with tail circuit
- Private network master (slaved to external clock)

### Diagnostics

#### Network

- CSU and DSU loopbacks

#### User

- Local DTE and loop
- Remote V.54

#### Test patterns

- 2047, 511, DDS stress patterns 1-4



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

### Receiver Sensitivity

- -45 dB at all rates

### Agency Approvals

- FCC Part 15, Class A
- FCC 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

- **Standalone:** 2.25" H, 8.75" W, 10.25" D
- **Rackmount:** 1" H, 6.75" W, 10.50" D
- **Standalone (DC):** 2.4" H, 8" W, 10.4" D

### Weight

#### Standalone

- 3 lbs

#### Rackmount

- 1.5 lbs

### Power

#### AC Standalone

- 115 VAC, 60 Hz, 8 watts

#### DC Standalone

- 20-60 VDC, 8 watts

## Ordering Information

Equipment	Part #
DSU III AR standalone	1202011L1
DSU III AR rackmount	1200034L1
DSU III AR w/ISDN DBU rackmount	1200067L1
DSU III AR w/V.34 DBU rackmount	1200172L2
DSU III AR DC standalone	1200270L1
19" RM2AC Shelf	1200061L1
RM2AC Blank Cover	1200061L2
19" Dual ESP Shelf (for DSU III AR DC)	1200202L1
Dual ESP Blank Cover	1200202L2

Detailed specifications for option modules are available on individual module data sheets.