



# Smart 16/16e Shelf

## Intelligent Communications Shelf

### Product Features

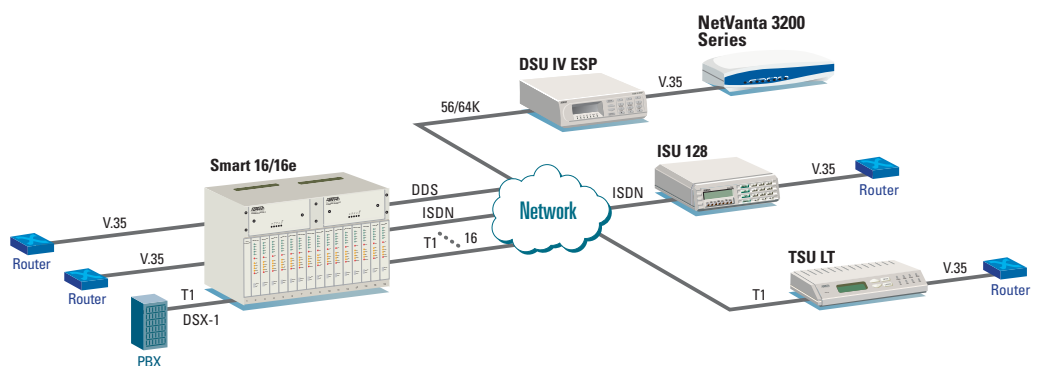
- One shelf supports up to 16 ADTRAN DDS, ISDN, T1 or Switched 56 products
- Embedded SNMP and Telnet (Smart 16e)
- SLIP/PPP (async) and 10BaseT Ethernet ports are provided for SNMP access (Smart 16e)
- 19" or 23" rackmount shelf system
- AC or DC powered with optional redundant power supply and redundant power feed
- Controller card configures and controls all 16 devices and allows access to an additional 15 shelves
- VT100 terminal interface for configuration, diagnostics, and performance monitoring of local and remote units
- Optional hand-held DATAMATE or RM display for local configuration
- Dry relay contacts provide alarm indications
- Midplane design facilitates hot-swapping
- Industry-leading five-year North American warranty

The ADTRAN™ Smart 16/16e shelf provides a **rackmount, high-density solution for central site WAN connectivity requirements**. The shelf provides flexibility, allowing installation of a mixture of 16 WAN communication devices. ADTRAN has a complete offering of ISDN, DDS, Switched 56, and FT1/T1 products that operate in the shelf. The Smart 16/16e shelf may be configured for 19" or 23" mounting with either AC or DC power. Load sharing and redundancy are provided with an optional second power supply. The shelf incorporates a midplane design that facilitates hot swapping for all devices, including the power supplies.

In addition to load sharing and power supply redundancy, additional security can be provided with power input redundancy in the optional dual power feed version of the Smart 16/16e shelf. This dual power feed option allows powering from two different sources (either both AC or both DC). If the primary power circuit breaker trips, the second, independent circuit continues to power the entire shelf without loss of service. The dual-feed shelves include two power supplies.

A common controller card is used to configure and control all devices installed in the shelf. Up to 15 additional shelves may be daisy chained and controlled locally or remotely by a VT100 terminal attached to a single controller card. An optional 2x16 LCD display and key pad is available in both hand-held DATAMATE™ and rackmount versions for local configuration by connecting directly to the front of the controller card via the RJ-11 jack.

The Smart 16e version provides SNMP Management via an embedded SNMP agent. Access is available through either a SLIP/PPP (async) port or a 10BaseT Ethernet port. Telnet access is also provided in this version. Through the Management Information Base (MIB)-II standard and ADTRAN-supplied enterprise MIBs, the Smart 16e shelf allows for configuration, monitoring, and troubleshooting of each device using standard SNMP network management programs such as ADTRAN's N-Form™, HP OpenView®, at View®, and SunNet Manager®.





**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



I.S. EN ISO 9001  
ADTRAN is a  
ISO 9001 registered company.



TL 9000  
ADTRAN is a  
TL 9000 registered company.

Printed in the U.S.A.  
64202023L1-8G April 2003  
Copyright © 2003 ADTRAN, Inc.  
All rights reserved.

# Smart 16/16e Shelf

## Intelligent Communications Shelf

### Product Specifications

#### Rear Panel Connections

- **VT100 Control Port:** DB-25 (EIA-232)
- VT100 Control/SLIP/PPP(Async)\*
- **Port:** DB-25 (EIA-232)
- **Ethernet 10BaseT:** RJ-48S\*
- **Control In and Out:** (2) RJ-11 (EIA -232)
- Captive Power Cord (AC version)
- Terminal Block (DC version)
- **Alarm:** Terminal Block

#### Front Panel Connections

##### Datamate

- RJ-11

##### SNMP and Telnet\*

- MIB II RFC 1213 compliant
- Enterprise MIB
- Telnet access available

##### Mounting

- 19" rack or cabinet
- 23" rack or cabinet

##### Agency Approval

- FCC Part 15 Class A
- FCC Part 68
- Industry Canada CS03
- UL/cUL 1950

##### 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

- 17.25" W, 10.50" H, 14.875" D

###### Weight

- 20 lbs. (empty), 45 lbs. (full)

###### Power

- 250 W max

##### Product Includes

- Smart 16 Chassis
- Smart 16 or Smart 16e Controller Card
- AC or DC Rear Power I/F Card
- AC or DC Power Supply (one for single bundles, two for dual feed bundles)
- User manual

### Ordering Information

Equipment	Part #
Smart 16 Shelf (AC) Single-feed	4202023L1
Smart 16 Shelf (AC) Dual-feed	4202023L2
Smart 16 Shelf (DC) Single-feed	4202023L3
Smart 16 Shelf (DC) Dual-feed	4202023L4
Smart 16e Shelf (AC) Single-feed w/SNMP	4202023L5
Smart 16e Shelf (AC) Dual-feed w/SNMP	4202023L6
Smart 16e Shelf (DC) Single-feed w/SNMP	4202023L7
Smart 16e Shelf (DC) Dual-feed w/SNMP	4202023L8
Redundant AC Power Supply	1202048L1
Redundant DC Power Supply	1200048L4
DATAMATE	1200045L1
Rackmount Display 1U High	1202045L2
Eight Blank panels (Front)	1200658L1
Eight Blank panels (Rear)	1200658L2

### Smart 16e SNMP Controller Upgrade

Equipment	Part #
Single-feed AC	4202162L1
Dual-feed AC	4202162L2
Single-feed DC	4202162L3
Dual-feed DC	4202162L4

### Smart 16/16e Rackmount Modules

Equipment	Part #
DSU III AR™	1200034L1
DSU III DBU™ ISDN	1200067L1
DSU III DBU V.34	1200172L2
T1 ESF CSU™	1202066L1
TSU V.35	1202077L1
TSU 530	1200099L1
TSU IQ™	1200277L1
TSU IQ w/PRI DBU	4200277L1
ISU 128®	1200087L1
ISU 2x64™	1200074L1

\* Applicable to Smart 16e only

Specifications subject to change without notice. ADTRAN and DATAMATE are trademarks of ADTRAN, Inc. N-Form is a registered trademark of ADTRAN, Inc. OpenView is a registered trademark of Hewlett Packard Corporation. NetView is a registered trademark of IBM Corporation. SunNet Manager is a registered trademark of Sun Microsystems, Inc. All registered trademarks and trademarks mentioned in this publication are the property of their respective owners.