



**D4- $n$  x 56/64 DSU DP**  
 **$n$  x 56/64 DATA SERVICE UNIT DATAPORT**

**ADTRAN**

**FEATURES**

- Plugs into WECO® D4 or equivalent, SLC 96, and the ADTRAN ACT 1 and AD4-24 channel banks
- Operates at data rates of  $n \times 56$  or  $n \times 64$  where  $n = 1$  to 24 or 56 kB/s to 1.536 MB/s
- Supports 64K Clear Channel operation
- Selectable stuff bit in non-Clear Channel (56 kB/s) mode
- Data may be assigned to consecutive or alternating time slots
- EIA 530 and V.35 interfaces supported
- Allows for bridging by disabling received data and timing outputs while allowing transmit data and timing inputs to be untermiated
- Test modes include Local Loopback, Remote Loopback (V.54 compatible), Remote Loopback with Test Pattern, Self Test
- Provides both internal and external transmit clock selections

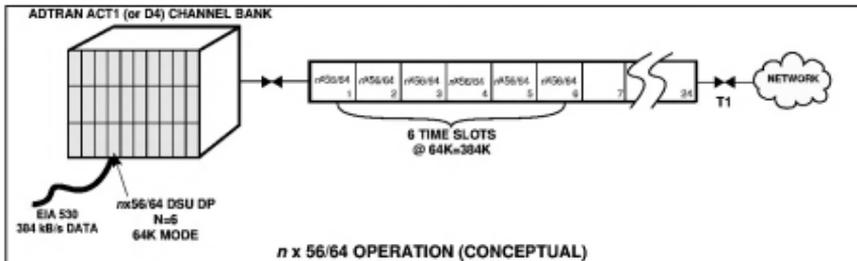
**BENEFITS**

- Compatible with a large installed base of channel banks
- Numerous bandwidth requirements supported by one card
- Allows more efficient utilization of network bandwidth
- Ensures network required 1 s density; provides capability to avoid false yellow alarm occurrences
- Supports full and fractional T1 network services
- Compatible with existing DTE interfaces
- Provides for both point-to-point and multipoint modes
- Enables quick and accurate problem isolation
- Enhances network synchronization options

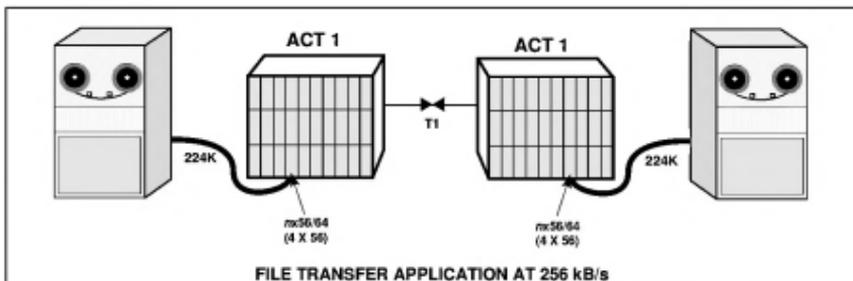
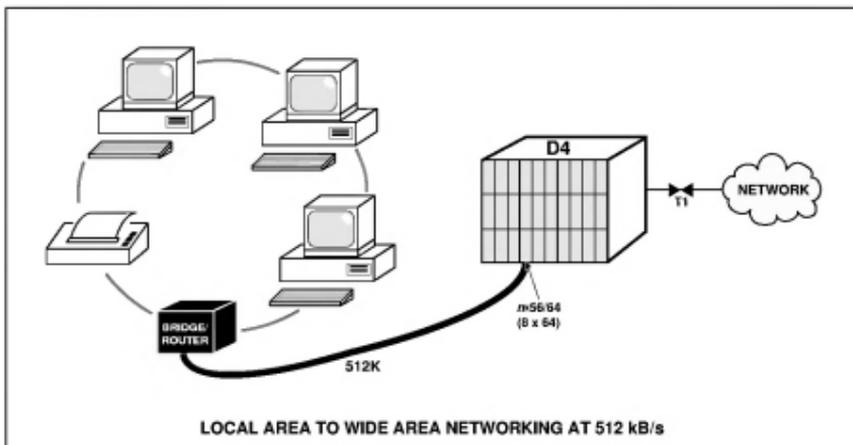
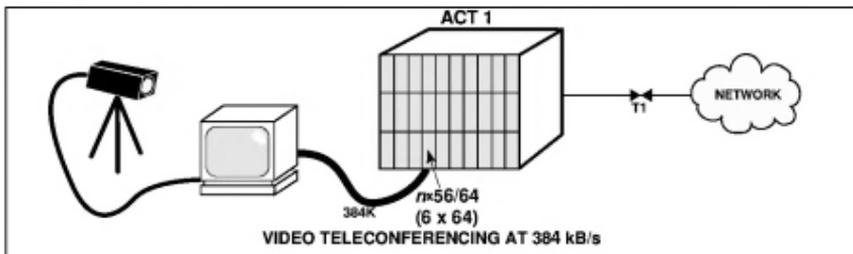
**DESCRIPTION**

The ADTRAN  $n \times 56/64$  DSU DP allows for connection of Data Terminal Equipment (DTE) devices at very high data rates. The  $n \times 56/64$  DSU DP accepts data from the customer over either an EIA-530 or V.35 interface. It then translates the composite bandwidth from the user into individual 56 or 64 kB/s channels for transport through either public or private network facilities. The number of time slots utilized, which determines the amount of bandwidth available to the user, is selected by setting the two rotary switches that program the value of  $n$ . An additional switch option allows for selecting 56 kB/s or 64 kB/s mode. The network must be capable of transporting 64 kB/s Clear Channel data before this option may be utilized.

The combination of these two parameters determines the operating bandwidth. This allows for data rates from 56K ( $n = 1$  and 56K mode) to 1.536 MB/s ( $n = 24$  and 64K mode). Data from the  $n \times 56/64$  DSU DP, in the form of individual time slots of information, is routed to the common equipment section of the channel bank. There, it is combined with information from other channel unit devices to form a composite T1 stream. The T1 signal is then available for transport over existing T1 or fractional T1 service offerings. The inverse of the procedure described above occurs at the remote channel bank location and the composite bandwidth is reconstructed and delivered to the remote user.



## APPLICATIONS



## SPECIFICATIONS

<b>Data Rates:</b>	<b>56K Mode</b>	- 56, 112, 168, 224, 280, 336, 392, 448, 504, 560, 616, 672, 728, 784, 840, 896, 952, 1008, 1064, 1120, 1176, 1232, 1288, 1344 kB/s
	<b>64K Mode</b>	- 64, 128, 192, 256, 320, 384, 448, 512, 576, 640, 704, 768, 832, 896, 960, 1024, 1088, 1152, 1216, 1280, 1344, 1408, 1472, 1536 kB/s
<b>DTE Interfaces:</b>		Conforms to EIA 530 and CCITT V.35 specifications
<b>DS1 Facility Interface:</b>		Fully compliant with D4 channel bank equipment
<b>Options:</b>	<b>Selection of <i>n</i></b>	(1 to 24)
	<b>Stuff Bit Location</b>	(Bit 8 or 2)
	<b>Mode of Operation</b>	(56 or 64 kB/s)
	<b>Time Slot Arrangement</b>	(Consecutive or Alternating)
	<b>Data Polarity</b>	(Normal or Inverted)
	<b>DTE Interface</b>	(V.35 or EIA 530)
	<b>Transmit Timing</b>	(Internal or External)
	<b>Receive Outputs</b>	(Enable or Disable)
	<b>Transmit Inputs</b>	(Terminated or Untermated)
	<b>Backplane DTE Interface</b>	(Connected or Disconnected)
<b>Faceplate Indicators:</b>	<b>LLB</b>	Local Loopback
	<b>RLB</b>	Remote Loopback
	<b>ERR</b>	Error
	<b>TD</b>	Transmit Data Active
	<b>RD</b>	Receive Data Active
<b>Test Modes:</b>		Local Loopback, V.54 Remote Loopback, V.54 Remote Loopback with Test Pattern (Test Pattern 511), Self Test
<b>Mechanical:</b>	<b>Size</b>	- 4.4 inches high, 1.4 inches wide, 10 inches deep
	<b>Weight</b>	- 12 ounces (nominal)
	<b>Mountings</b>	- D4, ADTRAN ACT 1, ADTRAN AD4-24 channel banks
<b>Environmental</b>	<b>Operating Temperature</b>	- 0° to 50°C
	<b>Storage Temperature</b>	- -40° to 85°C
	<b>Relative Humidity</b>	- Up to 95%, non-condensing

## ORDERING INFORMATION

<u>Equipment</u>	<u>ADTRAN Part Number</u>
D4- <i>n</i> x 56/64 DSU DP	1100025L1

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Specifications subject to change without notice

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