

## *PA-8T—An Eight Serial Port Adapter for Cisco 7000 Family Routers*

Increasing demand for bandwidth-intensive services and wide-area network (WAN) connectivity requires that network administrators maximize the capacity and efficiency of network routers. Cisco Systems' serial port adapters provide network administrators with flexible options for a broad range of port density requirements. Cisco's eight-port serial port adapter enhances network performance at a low price per port---making them a cost-effective solution for maximizing router efficiency.

### **Eight-Port Serial Port Adapter**

Cisco's eight-port serial port adapter (PA-8T) delivers high-density WAN connectivity for enterprise and service provider networks. It provides up to eight full-duplex serial interfaces for the Cisco 7200 and 7500 Series routers. The eight-port adapter requires only a single slot in a Cisco 7200 Series router. For Cisco 7500 Series routers, it requires one of the two available adapter slots on a Versatile Interface Processor (VIP2). Its high density doubles the number of available ports in the same space as the four port adapter (PA-4T+). This enables up to sixteen ports per chassis slot in VIP2-based systems.

The eight-port adapter offers unmatched flexibility. Network administrators can provision eight T1 (1.55 Mbps) or E1 (2.048 Mbps) ports, four ports delivering speeds up to 4 Mbps, or two ports delivering speeds up to 8 Mbps (E2). Three models of the PA-8T provide eight ports of either V.35, EIA/TIA-232 or X.21 electrical interfaces. A single eight-port fan-out cable provides connection to the PA-8T, simplifying cabling requirements. High port density, a low cost per port, and high-performance combine to deliver the highest possible network throughput while minimizing network infrastructure costs.

### **Benefits**

- Cost-effective solutions for any environment
  - Delivers very low price per port and provides higher performance than comparable solutions
  - Provides Internet service providers (ISPs) with high serial density for Cisco 7200 series routers, lowering cost per port and cost per subscriber
  - Enables up to 16 ports per slot in Cisco 7505, 7507, 7513 Series routers using VIP2 technology
- Supports high-density connectivity
  - Supports eight full-duplex T1/E1 connections or two full-duplex E2 connections
  - Adapter cables determine port mode (DTE or DCE)
  - Effectively doubles number of available ports in same space
- Carrier-Class Reliability and Serviceability
  - Field-replaceable design permits online insertion and removal for continuous router availability
  - Port-adapter handles simplify installation and removal
- Ease of use
  - LEDs indicate when the adapter is enabled for operation
  - Separate LEDs for each port indicate DTE or DCE function, transmit data, transmit clock, receive data, and receive clock signals
  - Metric (M3) thumbscrews included with each port adapter cable allow connections to devices that use metric hardware

## Specifications

### Ordering information

PA-8T-232	EIA/TIA-232 interface
PA-8T-V35	V.35 interface
PA-8T-X21	X.21 interface

### Operator indicators LEDs (all models)

DTE or DCE function

Transmit Data

Transmit Clock

Receive Data

Receive Clock

### Network interfaces

Eight full-duplex ports at T1 (1.55 Mbps) or E1 (2.048 Mbps)

Four full-duplex ports at up to 4 Mbps each

Two full-duplex ports at up to E2 speeds (8 Mbps)

Electrical interfaces (all ports have same interface)

V.35: PA-8T-V35

EIA/TIA-232: PA-8T-232

X.21: PA-8T-X21

### Connectors and Cables

V.35: DTE	34-pin Winchester-type male	CAB-OCT-V35-MT (=)
V.35: DCE	34-pin Winchester-type female	CAB-OCT-V35-FC (=)
EIA/TIA-232: DTE	DB-25 male	CAB-OCT-232-MT (=)
EIA/TIA-232: DCE	DB-25 female	CAB-OCT-232-FC (=)
X.21: DTE	DB-15 male	CAB-OCT-X21-MT (=)
X.21: DCE	DB-25 female	CAB-OCT-X21-FC (=)



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