

# EIA-530 SERIAL PIC

## Product Overview

The EIA-530 Serial PIC provides a cost-effective solution for enterprise WANs and service providers that need to establish connectivity between Juniper Networks M Series Multiservice Edge Routers and network devices with EIA-530 interfaces.

## Product Description

The Juniper Networks® EIA-530 Serial PIC is an excellent choice for mission-critical applications that require dependable serial interfaces. Offering hardware flexibility and adaptability for various applications, the 2-port EIA-530 Serial PIC provides connectivity to a wide range of synchronous equipment at data transfer rates ranging from 2 to 16 Mbps.

The modular design of this PIC provides both V.35 34-pin or X.21 DB-15 connectivity options through cable selection.

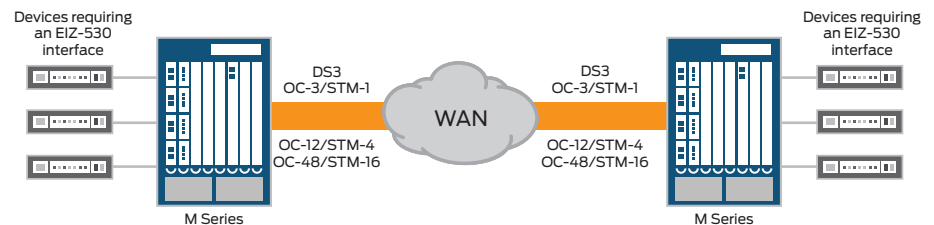


Figure 1: Deploying the EIA-530 Serial PIC

## Features and Benefits

- Compatibility with industry-standard Electronic Industries Association (EIA) specifications, enabling Juniper Networks M Series Multiservice Edge Routers to connect to any device with an EIA-530 interface.
- Support for transmission rates up to 16 Mbps, providing connectivity to channel service units/data service units, frame relay access devices, codecs, and communications security equipment.
- Connectivity to a wide variety of cryptographic equipment via user-configurable signaling, including resynchronization pulse and resynchronization duration.
- User-configurable clock/data inversion that helps bring interface clock and data signals within phase limit tolerance, ensuring error-free transmission.
- Comprehensive CLI commands that display the status of all control signals and clocking information as well as packet, byte, and resynchronization counters.
- Full support for quality-of-service features, including support for multiple queues and random early detection.

## Flexible, Scalable Connectivity

PER	M7i	M10i	M40e	M120
Chassis	8	16	64	32
Rack*	192	144	128	128

\*Per-rack densities are based on 48 RU (84 in/213.36 cm).  
Consult technical documentation for more details.

## Specifications

### Cables and Connectors

- Two DB-25 male connectors (one per port, included with PIC)
- V.35 requires an EIA-530 to V.35 cable and connects to a V.35 DTE 34-pin Winchester type male cable (one per port)
- X.21 requires an EIA-530 to X.21 cable and connects to an X.21 DTE DB-15 male cable

### Counters

- Per-port packet and byte counters (Layer 2 counters)
- Resynchronization counters
  - Number of resynchronizations initiated
  - Time of last resynchronization

### Clocking

- Transmitter Signal Element Timing is looped from the timing received on the Transmitted Signal Element DCE
- Supports inversion of the Transmit Data Element
- Baud rates supported (Mbps): 2.048, 2.341, 2.731, 3.277, 4.09, 5.461, 8.192, and 16.384

### Encapsulations

- High-Level Data Link Control
- Frame Relay
- Circuit cross-connect
- Translational cross-connect
- Point-to-Point Protocol

### Interoperability

- Full interoperability with KG-194 and KIV-19 devices
- Compliance with EIA-530 specifications

## Agency Approvals

### EMC

- AS/NZS 3548 Class A (Australia/New Zealand)
- BSMI Class A (Taiwan)
- EN 55022 Class A Emissions (Europe)
- FCC Part 15 Class A (USA)
- VCCI Class A (Japan)

### ETSI

- ETS-300386-2 Telecommunication Network Equipment Electromagnetic Compatibility Requirements

### Immunity

- EN 61000-3-2 Power Line Harmonics
- EN 61000-4-2 ESD
- EN 61000-4-3 Radiated Immunity
- EN 61000-4-4 EFT
- EN 61000-4-5 Surge
- EN 61000-4-6 Low Frequency Common Immunity
- EN 61000-4-11 Voltage Dips and Sags

### NEBS

Designed to meet these standards:

- GR-63-CORE: NEBS, Physical Protection
- GR-1089-CORE: EMC and Electrical Safety for Network Telecommunications Equipment
- SR-3580 NEBS Criteria Levels (Level 3 Compliance)

### Safety

- CAN/CSA-C22.2 No. 60950-00/UL 60950—Third Edition, Safety of Information Technology Equipment
- EN 60950, Safety of Information Technology Equipment

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## Ordering Information

MODEL NUMBER	PIC	PLATFORM
PE-2EIA530	2-port EIA-530 PIC with DB-25 connector	M7i, M10i
PB-2EIA530	2-port EIA-530 PIC with DB-25 connector	M40e, M120

## Interface Accessories

CBL-EIA530-V35-DTE	EIA-530 to V.35 cable (DTE). For conversion from an EIA-530 to V.35 interface.	M7i, M10i, M40e
CBL-EIA530-X21-DTE	EIA-530 to X.21 cable (DTE). For conversion from an EIA-530 to X.21 interface.	M7i, M10, M40e

## About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at [www.juniper.net](http://www.juniper.net).

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