

Mounting Requirements

Step 5 - Select:

- appropriate number of DIN rails based on the number of modules and the physical requirements

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The producer/consumer model multicasts messages. This means that multiple nodes can consume the same data at the same time from a single device.

Where you place POINT I/O modules in the control system determines how the modules exchange data.

For a Rockwell Automation controller to control 1734 I/O, the I/O must be on one of the following:

- the same network as the controller.
- a ControlNet network that is local to that controller.
- an EtherNet/IP network that is local to that controller.

Power Supply Distance Rating

Place modules to the right of the power supply. Each 1734 I/O module can be placed in any of the slots right of the power supply until the usable backplane current of that supply has been exhausted. An adapter provides 1000 mA current to the POINTBus backplane. The 1734-EP24DC or 1734-EPAC Expansion power supply provides up to 1300 mA. I/O modules require from 75 mA (typical for the digital and analog I/O modules) up to 220 mA or more.

Use the following table to plan the maximum size layout of your POINT I/O system.

Maximum Size Layout

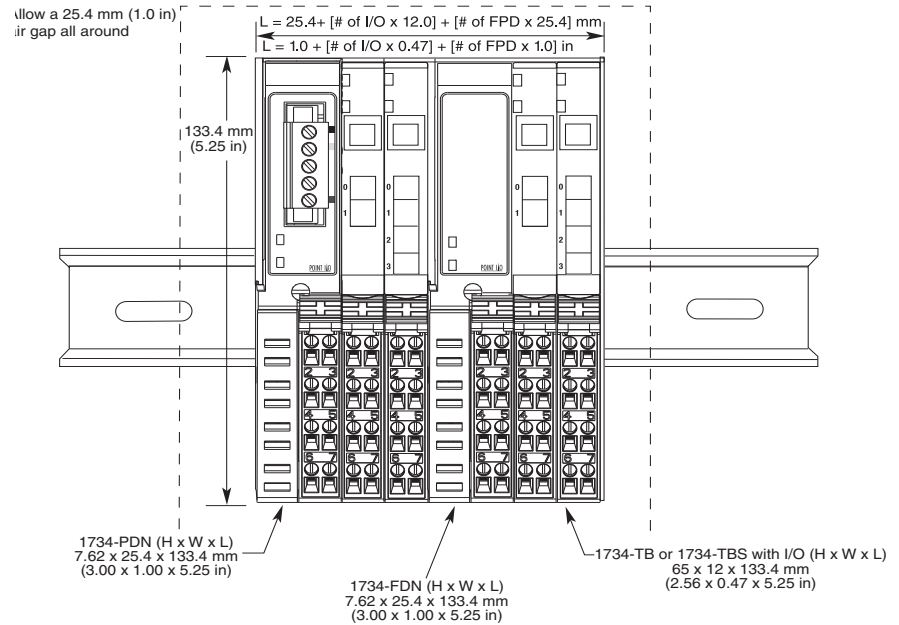
	POINTBus current	No. of I/O Modules with 24V DC Backplane Current (@ 75 mA each), max	No. of I/O Modules with Expansion Power Supplies, max	No. of I/O Module Connections, max
1734-PDN on DeviceNet network	1300 mA	Up to 17	Expansion power supply not allowed	Not to exceed scanner capacity
1734-ADN(X) on DeviceNet network	1000 mA	Up to 13	63	Not to exceed scanner capacity
1734-ACNR on ControlNet network	1000 mA	Up to 13	63	5 rack and 25 direct
1734-AENT on EtherNet/IP network	1000 mA	Up to 13	63	31 total connections (reduced to 20 with safety connections present) including 5 rack/enhanced rack
1734-APB on PROFIBUS network	1000 mA	Up to 13	63	Not to exceed scanner capacity
1734-EP24DC Expansion Power	Horizontal mounting: 1000 mA @ 5V DC for 10...19.2V 1300 mA @ 5V DC for 19.2...28.8V	Up to 17	63	Not to exceed scanner capacity
	Vertical mounting: 1000 mA @ 5V DC for 10...28.8V	Up to 17	63	Not to exceed scanner capacity
1734-EPAC Expansion Power	Horizontal mounting: 1300 mA @ 5.2V DC	Up to 17	63	Not to exceed scanner capacity
	Vertical mounting: 1000 MA @ 5.2V DC	Up to 17	63	Not to exceed scanner capacity

Mount the POINT I/O System

Mount the POINT I/O system on a DIN rail in the horizontal or vertical orientation. Use steel, 35 x 75.5 mm DIN rails (Cat. No. 199-DR1; 46277-3; EN 50022). The DIN rails for all POINT I/O system components must be mounted on a common, conductive surface to ensure proper electro-magnetic interference (EMI) performance. Secure DIN rail approximately every 200 mm (7.87 in).

Approximate Mounting Dimensions

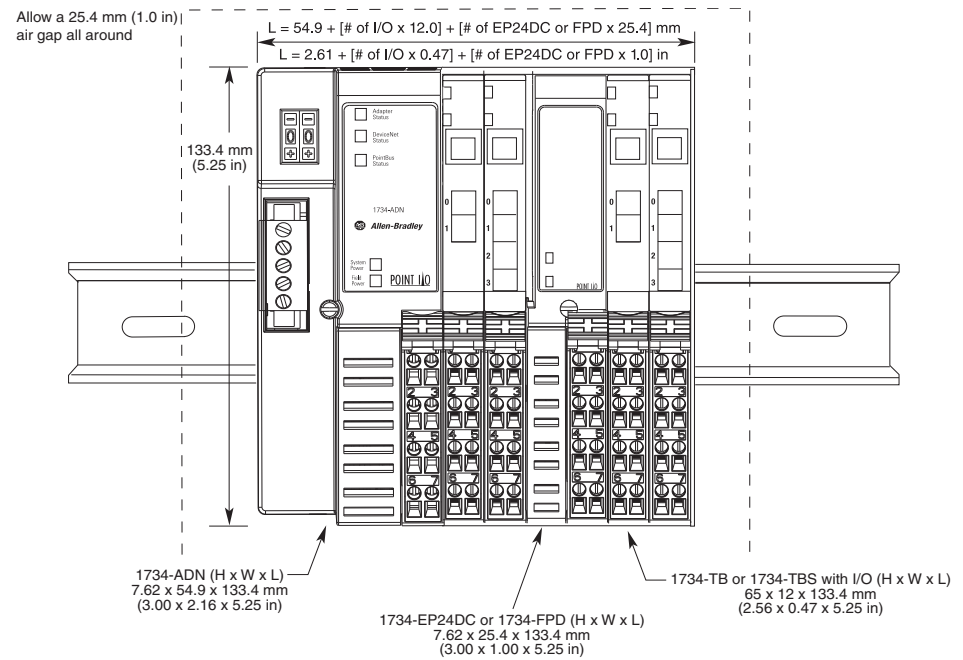
POINT I/O with 1734-PDN Mounting Dimensions



IMPORTANT

When mounting the 1734-IB8S, 1734-OB8S, and 1734-IE4S modules, ensure that there is 2 in. of clearance space above the POINT rail.

POINT I/O with 1734-ADN(X), 1734-ACNR, 1734-AENT, 1734-APB Mounting Dimensions



IMPORTANT

When mounting the 1734-IB8S, 1734-OB8S, and 1734-IE4S modules, ensure that there is 2 in. of clearance space above the POINT rail.

Related Documentation

These documents contain additional information concerning related Rockwell Automation products.

You can view or download publications at <http://literature.rockwellautomation.com>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

	Cat. No.	Description
General Information		DeviceNet Media (Media, Sensors and Distributed I/O) Catalog Guide
		DeviceNet Adapter Quick Start
		ControlNet Media
		EtherNet/IP Performance and Application Guide
		Industrial Automation Wiring and Grounding Guidelines
		Allen-Bradley Terminal Marking System Product Profile
Communication Interfaces	1734-ADN(X)	POINT I/O DeviceNet Adapter Module Installation Instructions, publication 1734-IN026 POINT I/O DeviceNet Adapter Module User Manual, publication 1734-UM002
	1734-PDN	POINT I/O DeviceNet Communication Interface Module Installation Instructions, publication 1734-IN057
	1734-AENT	POINT I/O Ethernet Adapter Installation Instructions, publication 1734-IN590 POINT I/O EtherNet/IP Communication Adapter Module User Manual, publication 1734-UM011
	1734-AENTR	POINT I/O 2 Port EtherNet/IP Adapter Installation Instructions, publication 1734-IN040 POINT I/O 2 Port EtherNet/IP Adapter Installation Instructions, publication 1734-UM014
	1734-ACNR	POINT I/O ControlNet Adapter Installation Instructions, publication 1734-IN582 POINT I/O ControlNet Adapter User Manual, publication 1734-UM008
	1734-APB	POINT I/O PROFIBUS Adapter Module Installation Instructions, publication 1734-IN014 POINT I/O PROFIBUS Adapter Module User Manual, publication 1734-UM005
Digital and Analog	1734 Series	POINT I/O Digital and Analog Modules User Manual, publication 1734-UM001
4 Channel IO-Link Master	1734-4IOL	POINT I/O 4 Channel IO-Link Master Installation Instructions, publication 1734-IN043 POINT I/O 4 Channel IO-Link Master Module User Manual, publication 1734-UM020
AC	1734-IA2 1734-IA4	120V AC 2 Input Module Installation Instructions, publication 1734-IN010
	1734-IM2 1734-IM4	220V AC 2 Input Module Installation Instructions, publication 1734-IN008
	1734-OA2 1734-OA4	120/220V AC 2 Output Module Installation Instructions, publication 1734-IN009

	Cat. No.	Description
DC	1734-IB2 1734-IB4 1734-IB8	24V DC 2, 4, or 8 Input Sink Module Installation Instructions, publication 1734-IN051
	1734-IB4D	POINT I/O 24V DC 4-Channel Discrete Input Module Installation Instructions, publication 1734-IN029
	1734-IV2 1734-IV4 1734-IV8	24V DC 2, 4, or 8 Input Source Module Installation Instructions, publication 1734-IN052
	1734-OB2E 1734-OB4E 1734-OB8E	POINT I/O Protected Output Module Installation Instructions, publication 1734-IN056
	1734-OB2EP	POINT I/O Protected Output Module Installation Instructions, publication 1734-IN586
	1734-OB2 1734-OB4 1734-OB8	POINT I/O Protected Output Module Installation Instructions, publication 1734-IN018
	1734-OV2E 1734-OV4E 1734-OV8E	POINT I/O Protected Sink Output Module Installation Instructions, publication 1734-IN585
Analog	1734-IE2C 1734-IE2V	POINT I/O 2 Current and 2 Voltage Input Analog Modules Installation Instructions, publication 1734-IN027
	1734-IE4C	POINT I/O 4 Channel High Density Current Input Module Installation Instructions publication 1734-IN032
	1734-IE8C	POINT I/O 8 Channel High Density Current Input Module Installation Instructions publication 1734-IN033
	1734-OE2C 1734-OE2V	24V DC Analog 2 Channel Current Output Module Installation Instructions, publication 1734-IN002
	1734-OE4C	POINT I/O 4 Channel Analog Current Output Module Installation Instructions, publication 1734-IN034
	1734-IR2 1734-IR2E 1734-IT2I	POINT I/O RTD and Isolated Thermocouple Input Modules Installation Instructions, publication 1734-IN011
Serial Interface Modules	1734-232ASC/ 1734-485ASC	RS-232, -422, and -485 ASCII Modules Installation Instructions, publication 1734-IN588 RS-232, -422, and -485 ASCII Modules User Manual, publication 1734-UM009
	1734-SSI	Synchronous Serial Interface Module with Absolute Encoder Installation Instructions, publication 1734-IN581 Synchronous Serial Interface Module with Absolute Encoder User Manual, publication 1734-UM007
	1734-IK 1734-IJ	5V and 24V Encoder/Counter Modules Installation Instructions, publication 1734-IN005 5V and 24V Encoder/Counter Module User Manual, publication 1734-UM006
	1734-VHSC5 1734-VHSC24	5V and 24V DC Very High Speed Counter Module Installation Instructions, publication 1734-IN003 5V and 24V DC Very High Speed Counter Module User Manual, publication 1734-UM003

	Cat. No.	Description
Bases	1734-TB, 1734-TBS	Wiring Base Assembly with 8 Point Cage-Clamp Removable Terminal Block Installation Instructions, publication 1734-IN511
	1734-TBS, 1734-TB3S, 1734-RTBS, 1734-RTB3S	Wiring Base Assembly with 12 Point Cage-Clamp Removable Terminal Block Installation Instructions, publication 1734-IN013
	1734-TOP, 1734-TOPS, 1734-TOP3, 1734-TOP3S	POINT I/O One-piece Terminal Bases Installation Instructions, publication 1734-IN028
	1734-TBCJC	Cold Junction Compensation Wiring Base Assembly Installation Instructions, publication 1734-IN583
Power Units	1734-FPD	Field Potential Distributor Module Installation Instructions, publication 1734-IN059
	1734-EP24DC	24V DC Expansion Power Supply Installation Instructions, publication 1734-IN058
	1734-EPAC	120/240V AC Expansion Power Supply Installation Instructions, publication 1734-IN017
Safety	1734-IB8S, 1734-OB8S, 1734-IE4S	POINT Guard I/O Safety Modules Installation and User Manual, publication 1734-UM013