

## 1734 POINT I/O

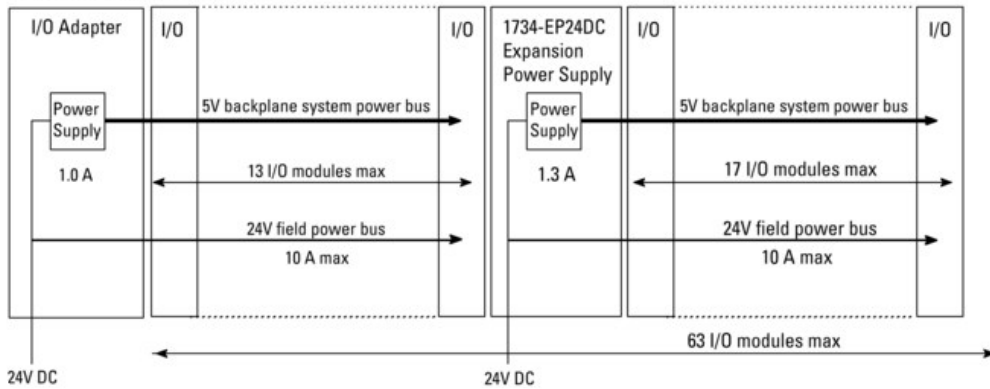
### I/O Adapter and Communication Interface Modules

POINT I/O has two classes of communication interfaces.

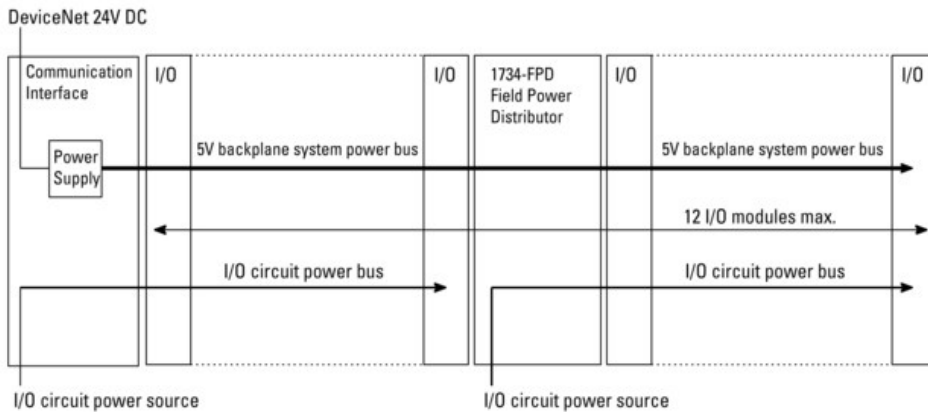
An **I/O adapter module** provides an isolated DC/DC converter between field 24V DC and 5V backplane. You can connect up to 13 I/O modules and an I/O adapter with a maximum of 10 A field power. Additional I/O modules require the use of one or more POINT I/O 24V DC expansion power units. An I/O adapter supports up to a maximum of 63 I/O modules. The I/O adapter modules are available for ControlNet, DeviceNet (with and without subnet connectivity), EtherNet/IP, or PROFIBUS DP networks.

The **DeviceNet Communication Interface module** interfaces I/O modules to the DeviceNet link and converts field 24V DC power to 5V DC backplane power. The backplane power is derived from the DeviceNet network and is not isolated. I/O circuits require a power supply specified for the I/O module connected to the right of the communication interface module. You can connect up to 13 I/O modules to the DeviceNet Communication Interface module, with a maximum of 10 A field power.

#### POINT I/O with an I/O Adapter Module



#### POINT I/O with Communication Interface Module



### I/O Adapter and Communication Interface Modules Product Selection

Cat. No.	Description	Compatible with POINT Guard I/O	Supports Expansion Power Supplies	Number of I/O Points, Max.*
<b>DeviceNet</b>				
1734-PDN	<b>DeviceNet Communication Interface</b> <ul style="list-style-type: none"> <li>Each POINT I/O module counts as a node on the main DeviceNet network.</li> <li>Total backplane current of I/O modules cannot exceed 1.3 A.</li> </ul>	Yes	No	136
1734-ADN	<b>DeviceNet I/O Adapter</b> <ul style="list-style-type: none"> <li>A total of 63 POINT I/O modules can be assembled on a single DeviceNet node.</li> </ul>	No	Yes	504
1734-ADNX	<b>DeviceNet I/O Adapter with Expansion Port</b> <ul style="list-style-type: none"> <li>A total of 63 POINT I/O modules can be assembled on a single DeviceNet node.</li> <li>Expansion network port allows for a DeviceNet subnet.</li> <li>Increases the reach of DeviceNet from 500 to 1500 meters.</li> <li>Increases nodes per DeviceNet scanner from 63 to more than 126 (dependent on DeviceNet scanner capacity).</li> </ul>	No	Yes	504
<b>ControlNet</b>				
1734-ACNR	<b>ControlNet I/O Adapter</b> <ul style="list-style-type: none"> <li>A total of 63 POINT I/O modules can be assembled on a single ControlNet node.</li> <li>Up to 25 direct connections and 5 rack connections are allowed.</li> </ul>	No	Yes	504
<b>EtherNet/IP</b>				
1734-AENT	<b>EtherNet/IP Twisted Pair Media I/O Adapter</b> <ul style="list-style-type: none"> <li>A total of 63 POINT I/O modules can be assembled on a single EtherNet/IP node.</li> <li>Refer to the User Manual to determine the ratings for direct and rack connections allowed.</li> </ul>	Yes	Yes	504
1734-AENTR	<b>2-Port EtherNet/IP I/O Adapter Module</b> <ul style="list-style-type: none"> <li>Includes 2 EtherNet/IP ports, configured as embedded switch.</li> <li>Supports star, tree, linear, and ring topologies.</li> <li>Up to 20 direct connections and 5 rack optimized connections (digital I/O only) are allowed.</li> <li>Total backplane current of I/O modules cannot exceed 0.8 A.</li> </ul>	Yes	Yes	504
<b>PROFIBUS DP</b>				
1734-APB	<b>PROFIBUS DP I/O Adapter</b> <ul style="list-style-type: none"> <li>A total of 63 POINT I/O modules can be assembled on a single PROFIBUS DP node.</li> </ul>	No	Yes	504

\* Using the eight-point digital I/O modules.

## Specifications

Cat. No.	Input Voltage Range	Field Side Power Requirements	Inrush Current	Power Consumption (W) at 24V	Power Dissipation, Max.	PointBus Current (mA)
1734-PDN	11...25V DC DeviceNet specification	400 mA at 24V DC (+4% = 25V DC)	6 A for 5 ms	8.0 W	1.2 W at 25V	1300*
1734-ADNX	10...28.8V DC	400 mA at 24V DC (+20% = 28.8V DC)	6 A for 10 ms	8.0 W	2.8 W at 28.8V	1000‡
1734-ACNR		425 mA at 24V DC (+20% = 28.8V DC)		8.0 W	2.8 W at 28.8V	1000‡
1734-AENT		400 mA at 24V DC (+20% = 28.8V DC)	4.5 W	2.8 W at 28.8V	700§	
1734-AENTR		24V DC at 400 mA nom 12V DC at 800 mA nom 10...28.8V DC, 1000 mA max	10.4 W	6.3 W at 28.8V	800	
1734-APB		400 mA at 24V DC (+20% = 28.8V DC)	8.0 W	2.8 W at 28.8V	1000‡	

\* 1300 mA at 5V DC  $\pm$ 5% (4.75...5.25V).  
‡ 1000 mA at 5V DC  $\pm$ 5% (4.75...5.25V).  
§ 700 mA when input voltage < 17V DC.