

1734 POINT I/O

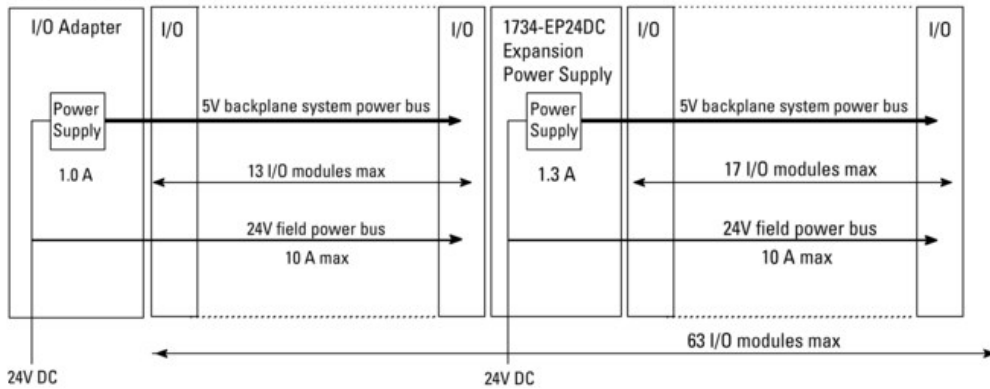
I/O Adapter and Communication Interface Modules

POINT I/O has two classes of communication interfaces.

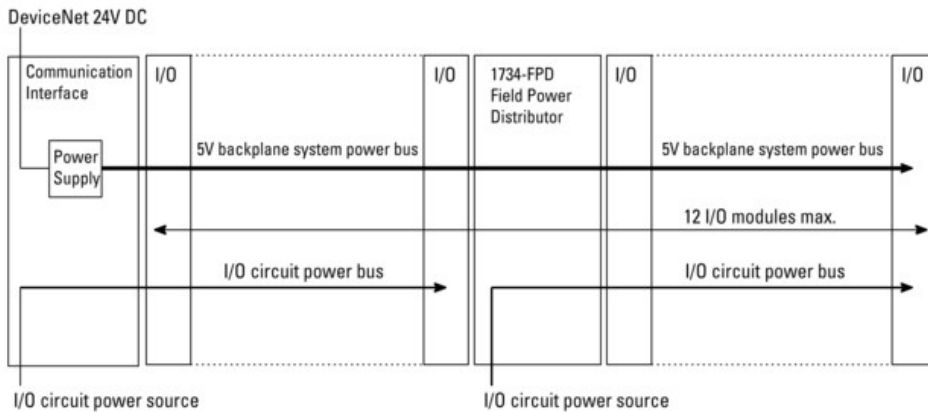
An **I/O adapter module** provides an isolated DC/DC converter between field 24V DC and 5V backplane. You can connect up to 13 I/O modules and an I/O adapter with a maximum of 10 A field power. Additional I/O modules require the use of one or more POINT I/O 24V DC expansion power units. An I/O adapter 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.* |
|--------------------|---|---------------------------------|-----------------------------------|-----------------------------|
| DeviceNet | | | | |
| 1734-PDN | DeviceNet Communication Interface <ul style="list-style-type: none"> Each POINT I/O module counts as a node on the main DeviceNet network. Total backplane current of I/O modules cannot exceed 1.3 A. | Yes | No | 136 |
| 1734-ADN | DeviceNet I/O Adapter <ul style="list-style-type: none"> A total of 63 POINT I/O modules can be assembled on a single DeviceNet node. | No | Yes | 504 |
| 1734-ADNX | DeviceNet I/O Adapter with Expansion Port <ul style="list-style-type: none"> A total of 63 POINT I/O modules can be assembled on a single DeviceNet node. Expansion network port allows for a DeviceNet subnet. Increases the reach of DeviceNet from 500 to 1500 meters. Increases nodes per DeviceNet scanner from 63 to more than 126 (dependent on DeviceNet scanner capacity). | No | Yes | 504 |
| ControlNet | | | | |
| 1734-ACNR | ControlNet I/O Adapter <ul style="list-style-type: none"> A total of 63 POINT I/O modules can be assembled on a single ControlNet node. Up to 25 direct connections and 5 rack connections are allowed. | No | Yes | 504 |
| EtherNet/IP | | | | |
| 1734-AENT | EtherNet/IP Twisted Pair Media I/O Adapter <ul style="list-style-type: none"> A total of 63 POINT I/O modules can be assembled on a single EtherNet/IP node. Refer to the User Manual to determine the ratings for direct and rack connections allowed. | Yes | Yes | 504 |
| 1734-AENTR | 2-Port EtherNet/IP I/O Adapter Module <ul style="list-style-type: none"> Includes 2 EtherNet/IP ports, configured as embedded switch. Supports star, tree, linear, and ring topologies. Up to 20 direct connections and 5 rack optimized connections (digital I/O only) are allowed. Total backplane current of I/O modules cannot exceed 0.8 A. | Yes | Yes | 504 |
| PROFIBUS DP | | | | |
| 1734-APB | PROFIBUS DP I/O Adapter <ul style="list-style-type: none"> A total of 63 POINT I/O modules can be assembled on a single PROFIBUS DP node. | 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 ±5% (4.75...5.25V).
‡ 1000 mA at 5V DC ±5% (4.75...5.25V).
§ 700 mA when input voltage < 17V DC.