1734 Communication Adapters Power Specifications

	1734-AENT(R)	1734-ACNR	1734-PDN	1734-ADN(X)	1734-APB
Power dissipation, max	2.8 W @ 28.8V	2.8 W @ 28.8V	1.2 W @ 25V	2.8 W @ 28.8V	2.8 W @ 28.8V
Input overvoltage protection	Reverse polarity protected				
Interruption	Output voltage will stay within specifications when input drops out for 10 ms @ 10V with max load.		—	Output voltage will stay within specifications when input drops out for 10 ms @ 10V with max load.	

(1) 700 mA when input voltage < 17V DC.

(2) 1000 mA @ 5V DC ±5% (4.75…5.25V).

(3) 1300 mA @ 5V DC ±5% (4.75…5.25V).

Expansion Power Supplies

The 1734-EP24DC or 1734-EPAC expansion power supplies provides two services:

- Breaks the field power distribution at the left of the power supply (1734-EP24DC or 1734-EPAC) from the field power distribution to the right of the power supply (1734-EP24DC or 1734-EPAC)
- Adds an additional 1.3 A of current to the POINTBus for I/O modules to the right of the power supply (1734-EP24DC or 1734-EPAC)

The expansion power unit maintains the integrity of the POINT I/O backplane by not interrupting the POINTBus data.

The 1734-EP24DC expansion power unit passes 24V DC field power on the POINTBus backplane to the I/O modules to the right of it. The 1734-EPAC expansion power unit passes 120/240V AC field power on the POINTBus backplane to the I/O modules to the right of it. These units extend the backplane bus power and creates a new field voltage partition segment for driving field devices for up to 17 I/O modules. The expansion power units separate field power from I/O modules to the left of the unit, effectively providing functional and logical partitioning for:

- separating field power between input and output modules.
- separating field power to the analog and digital modules.
- grouping modules to perform a specific task or function.

You can use multiple expansion power units with the 1734-ADN, 1734-ADNX, 1734-ACNR, 1734-AENT, and 1734-APB communication adapters to assemble a full system. For instance, if you are using the 1734-ADN adapter, you can use a 1734-EP24DC or 1734-EPAC expansion power unit to add additional modules.

For example, if you have a 36 module system with a 1734-ADN adapter, you have to add at least two or more 1734-EP24DC or 1734-EPAC expansion

power units to provide more POINTBus current for modules to the right of the supply.

- 24…5V DC converter (1734-EP24DC)
  120/240V AC to 5V DC converter (1734-EPAC)
- 1.3 A, 5V DC output (extend backplane power)
- Starts new voltage distribution
- Partitioning
- Dark-gray color for easy visual inspection and identification

You can use the 1734-EP24DC or 1734-EPAC expansion power supply only with POINT I/O adapters. Do not use it with the 1734-PDN or 1734D series communication interfaces.

1734 Expansion Power Supplies Technical Specifications

	1734-EP24DC	**1734-EPAC**
Field side power requirements, max	400 mA @ 24V DC (+20% = 28.8V DC max)	200 mA @ 120V AC, 100 mA @ 240V AC
Inrush current, max	6 A for 10 ms	2 A for 6 ms
POINTBus output current rating	Horizontal mounting: 1 A @ 5V DC for 10…19.2V input 1.3 A @ 5V DC for 19.2…28.8V input Vertical mounting: 1 A @ 5V DC for 10…28.8V input	Horizontal DIN rail mounting: 1.3 A @ 5.2V DC Vertical DIN rail mounting: 1.0 A @ 5.2V DC
Overvoltage protection, inputs	Reverse polarity protected	MOV and fuse protected
PowersSupply interruption protection	Output voltage will stay within specifications when input drops out for 10 ms @ 10V with max load	Output voltage will stay within specifications when input drops out for 10 ms @ 85V with max load
Power supply input voltage, nom	24V DC	120/240V AC
Operating voltage range	10…28.8V DC	85…264V AC
Power consumption, max	9.8 W @ 28.8V DC	15.1 W @ 264V AC
Power dissipation, max	3.0 W @ 28.8V DC	8.4 W @ 264V AC
Thermal dissipation, max	10.0 BTU/hr @ 28.8V DC	28.7 BTU/hr @ 264V AC
Isolation voltage	50V (continuous), Basic Insulation Type Type tested at 2600V DC for 60 s, User power to system, User power to Chassis ground, system to Chassis ground	264V (continuous), Reinforced Insulation Type Type tested @ 3250V DC for 60 s, User power to system
Field power supply voltage range	10…28.8V DC	120…240V AC
Field power supply current, max	10 A	10 A