Quick Installation Guide

APS-120-24
120W DIN-Rail Switching Power Supply

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· Overview

APS-120-24 is an environment friendly power supply for standard DIN-rail mounting with feature of cost-effective and energy efficient. The products offer a high level of stability and immunity to noise, it also has an extremely compact design for space saving and are ideal for applications such as industrial control equipment machinery and all kinds of applications in harsh environment. With good EMC performance, the products compliant with international standards for EMC and safety specifications meet IEC/EN/UL62368, UL61010.

	APS-120-24
Output power (W)	120
Nominal Output Voltage & Current (Vo/Io)	24 V/5 A
Output Voltage Adjustable Range ADJ*	23.5 V-28 V
Efficiency @230VAC (Typ.)	94%
Max. Capacitive Load	50000 μF
Certification	UL/EN

· Package Checklist

- 1 x Product Unit
- 1 x Quick Installation Guide

· Warning

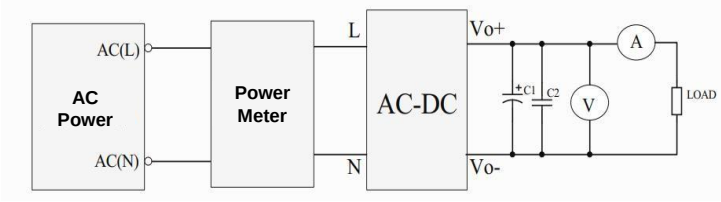
- The power supply should be handled gently to avoid damage to the product caused by impact or fall.
- It is forbidden to open the product shell or touch the internal devices of the power supply to avoid the product from being damaged by static electricity, device stress and other vulnerable conditions.
- For the self-contained DIP switch products, the product has been debugged for the customer, it is recommended not to toggle the product switch at will in the later stage. If the switch error will cause product damage, you should carefully read the technical manual operation guide, or consult our technicians before operation.
- When the power supply is working, do not approach the power supply or touch the radiator and power supply shell to avoid possible injury to the body when the power supply is abnormal.

· Notes

- Before powering on the product, ensure that the input, output, and signal pins of the product are properly connected. At the same time, confirm whether the screw is tight, whether the wiring end is clamped, and watch whether the output LED light is always on after power-on.
- The input of the power supply is dangerous of high voltage, and it must be ensured that the product housing cannot be disassembled.
- Equipment using AC-DC power supply, if it does not work for a long time, should be turned on every six months for half an hour to recharge the electrolytic capacitor to ensure the life of the power supply. Conventional AC-DC products are not suitable for long-term work in high temperature environments, if such use is necessary, it is recommended to replace new products regularly every two years. There should be no large heat-generating devices near the power supply, such as CPUs, motors, etc.
- The power supply output has its own LED display light, which can watch the LED status and identify the working status of the power supply. If the LED light is always on, it means that the power supply is working normally, and the LED light is always off or flashing, it means that the power supply is working abnormally.

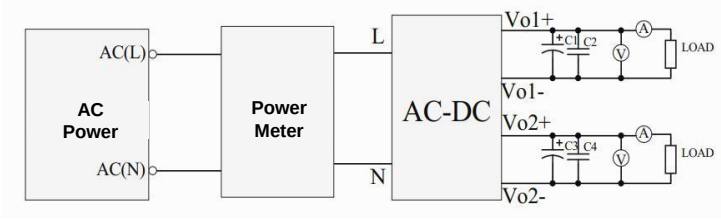
· Basic Test Circuit Connection

- The single-output product test connection is shown in the figure



Single basic test circuit connection

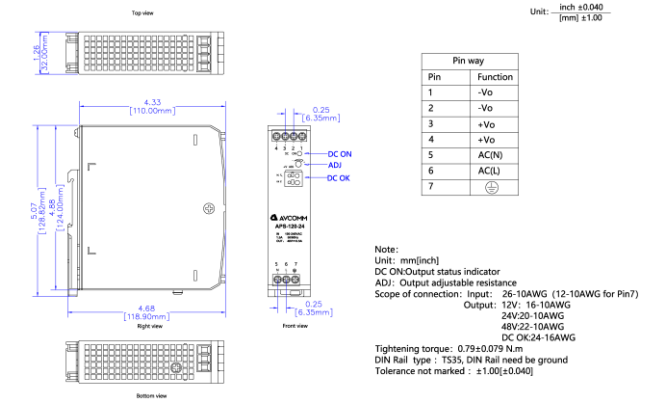
- The multi-output product test connection is shown in the figure



Multiple basic test circuit connection

- C1 and C3 are output filter electrolytic capacitors, and it is recommended to use high-frequency low-impedance electrolytic capacitors. The capacitance selection recommendation refers to the recommended specification value in the technical manual, and the capacitor withstand voltage derating is greater than 80%.
- C2 and C4 are ceramic capacitors that remove high-frequency noise, and the value selection is recommended according to the recommended specification values in the technical manual. Note: For three or more output power supplies, the primary side application circuit is the same, and the secondary side can be regarded as two or three independent converters to select filtering parameters.

· Apperance



· Installation

- The power supply has a rail spring buckle on the back for direct mounting on rail metal, automatic locking buckle, and screw holes on the side.
- The long side of the product is close to the metal plate to improve the heat dissipation coefficient of the product. It is recommended to add thermal compound between the side of the product and the metal plate.

· FAQ

- The AC-DC power input generally adopts full-bridge rectification to meet the two power supply modes of AC and DC voltage.
- In practice, a minimum load of 10% of full load is recommended.
- The maximum operating temperature is 70°C, and derating is required when the temperature reaches 50°C.
- If the system has high timing requirements, it is necessary to focus on the startup time of the power supply. When the power supply is abnormal, the control circuit is required to power down to ensure the normal shutdown of the entire system.
- The output voltage of the product is adjustable, the range is generally ±10%, the output voltage is adjusted high, and the total power of the output of the product cannot exceed the rated power

· Support

At AVCOMM, you can use the online service forms to **request the support**. The submitted forms are stored in server for AVCOMM team member to assign tasks and monitor the status of your service. Please feel free to write to info@avcomm.us if you encounter any problems.

· Warranty

5-year Global warranty are available for AVCOMM products assuring our customers that the products shall remain free from defects in workmanship or materials and conform in all material respects to AVCOMM specifications, or purchasers supplied and accepted specifications. The warranty is limited to the repair and/or replacement, at AVCOMM sole discretion, of the defective product during its warranty period. The customer must obtain a Return Merchandise Authorization (RMA) approval code prior to returning the defective Product to AVCOMM for service. The customer agrees to prepay shipping charges, to use the original shipping package or equivalent, and to ensure the product or assume the risk of loss or damage in transit. repaired or replaced products are warranted for ninety (90) days from the date of repair or replacement, or for the remainder of the original product's warranty period, whichever is longer.

· Disclaimer

AVCOMM reserves the right to make changes to this QIG or to the product hardware at any time without notice. It is the user's responsibility to determine whether there have been any such updates or amendments herein.

Defects, malfunctions, or failures of the warranted Product(s) caused by damage resulting from unforeseeable incidents (such as lightings, floods, fire, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances and surge, host computer malfunction and virus, incorrect power input, or incorrect cabling, incorrect grounding and damages caused by misuse, abuse and unauthorized alteration or repair are not warranted.