

FEATURES

- **Extended Temperature Range**
- **Universal AC Input**
- **24V or 28V Output**
- **3A Max Output Current**
- **82% Efficient**
- **Operational Redundancy**
- **No Cooling Fans Required**
- **AAR Binding Post Wire Connections**

DESCRIPTION

The 28V, 84W Power Supply is a high efficiency, switch-mode power supply (SMPS) that can handle input voltages from 90VAC to 253VAC at 47Hz to 63Hz. It is designed to operate from -30C to +70C ambient with no cooling fans. Over the temperature and input voltage range, and with load transitions from 10% to 100%, the SMPS will maintain the output voltage within 2%. It can also produce continuous output power of 84W at temperatures from -30C to +70C giving the unit excellent transient overload capabilities.

The 28V, 84W design has under-voltage lockout, over current limit with auto-restart and over-voltage protection. It is designed to protect itself from short circuit or overload currents and it is designed to protect the load from internal failures. The power supply will reduce the output voltage when a current greater than 3A is required and an alarm will activate. If the current continues to rise, the voltage will eventually reach an under-voltage condition, causing the power supply to shutdown and auto-restart. If the fault condition clears, the power supply will automatically begin normal operation. If it does not clear, the power supply will continue to shutdown and auto-restart until the fault clears or the power supply is shut off.

The 28V, 84W design also includes an alarm relay used for indication. The alarm relay contact will be normally closed during standard operation. If a fatal fault exists that prevents the power supply from sourcing the proper current at the proper voltage, the alarm relay contact will open.



The 28V, 84W design offers operational redundancy in the same chassis. This is achieved using a hot-swappable drawer which contains a complete 28V, 84W supply. This ensures that a failure of one supply will cause the entire load to be sourced from the redundant supply. In normal operation each supply shares the load by tuning of external potentiometers. The supply can be ordered with one or two drawers. The individual drawer is also available separately to add redundancy later if desired. External connections for input AC and output DC are made using standard AAR binding posts. Alarm relay contact connections are made using standard barrier strip terminals.

ELECTRICAL SPECIFICATIONS

Input Voltage _____ 90-253V_{AC}
 Output Voltage _____ 28V_{DC} +/- 2%
 Maximum Output Power _____ 84W@28 V_{DC}
 Min Operating Temperature _____ -30 °C
 Max Operating Temperature _____ +70 °C
 Alarm Relay Contact Rating _____ 5A

MECHANICAL SPECIFICATIONS

Height _____ 3.5in(2U)
 Width _____ 19in
 Depth _____ 12in

ORDERING INFORMATION

Item	Catalog Number
28V 84W Chassis (w/Dual Supplies)	SiPS-28V-84W-DS
28V 84W Chassis (w/Single Supply)	SiPS-28V-84W-SS
28V 84W Drawer	SiPS-28V-84W-DW

Substitute 24V for 28V in the part # when choosing a 24V output