

FEATURES

- AC inputs from 100VAC to 253VAC
- 24V or 28V Output
- 1400W Maximum Output Power @ 70C
- Power Factor Correction
- 82% Efficient minimum
- Programmable Over Voltage Crowbar
- Very Low Output Noise
- .5% Regulation Across Line/Load
- Operational Redundancy with two Units
- Operates from -30C to +70C
- No Cooling Fans Required
- AAR Binding Post Wire Connections

DESCRIPTION

The Trilogy Products 1400W Power Supply is a 19” rack mount, high efficiency, switch-mode power supply that provides output voltage ranges from 24V to 28V. Any output can be achieved within the specified range by the setting of an external potentiometer. The unit operates from 100VAC to 253VAC in ambient temperatures of -30C to +70C without cooling fans. Over the temperature and input voltage range and with load transitions from 0% to 100%, the SMPS will maintain the output voltage within +/- .5% of nominal. The output also has a ripple voltage of less than 50mVp-p and noise of less than 140mVp-p.

The SiPS-xxV-1400W offers operational redundancy when paired with a second unit. 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 the tuning of external potentiometers.

The SiPS-xxV-1400W has several protection features to insure safe operation. These include under-voltage lockout, over current limit with auto-restart and over-voltage protection. The power supply is designed to protect itself from short circuit or overload currents and it is designed to protect the load from internal failures. The unit will reduce its output voltage when a current of 130% of maximum or greater is required due to a load failure. If the current continues to rise, the voltage will eventually reach an under-voltage condition, causing the power supply to shutdown. If the fault condition clears, the power supply will automatically begin normal operation. If it does not clear, the power supply will remain in a shutdown state.

An alarm relay used for indication and remote monitoring is also provided. The alarm relay contact will be normally closed during standard operation. If a fault exists that prevents the power supply from operating within acceptable parameters, the alarm relay contact will open.



The power supply contains digital output meters, consisting of seven-segment displays, which indicate the supply voltage and current and the bus voltage. A replaceable green lamp indicates proper supply operation. Three red LED’s representing under voltage (UV), over voltage (OV) and over current (OC) are available on the front panel. The “RESET” button on the front panel will reset the alarm relay and clear status LED’s once a fault has been fixed. The “LAMP TEST” button will flash all the displays and LED’s to provide verification of their operation. 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.....	100-253V _{AC}
Output Voltage.....	xxV +/- .5%
Maximum Output Power.....	1400W
Min Operating Temperature.....	-30°C
Max Operating Temperature.....	+70°C
Alarm Relay Contact Rating.....	5A
Output Ripple Voltage.....	<140mVp-p

MECHANICAL SPECIFICATIONS

Height.....	8.7in (5U)
Width.....	19in
Depth.....	20.5in

ORDERING INFORMATION

SiPS-xxV-1400W

Note: xx refers to unit output voltage (24 or 28)

