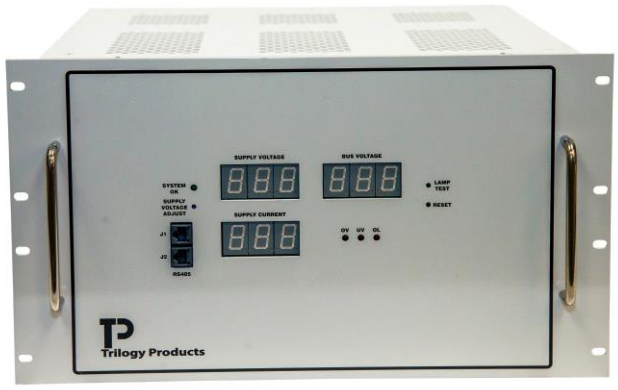
Trilogy Products

SiPS-110V-5500W
SiPS-110V-3000W

SWITCH MACHINE POWER SUPPLY

FEATURES

- **AC inputs – 115/230VAC or 3PH 208VAC**
- **110V to 140V Programmable Output**
- **5500W Peak Power @ 70C from 3PH 208**
- **3000W Peak Power @ 70C from 115/230VAC**
- **87% - 90% Efficient**
- **Over Current & Voltage Protection**
- **Operational Redundancy with two Units**
- **Operates from -30C to +70C**
- **No Cooling Fans Required**
- **AAR Binding Post Wire Connections**



DESCRIPTION

The Trilogy Products Switch Machine Power Supply is a 19" rack mount, high efficiency, switch-mode power supply that provides an output voltage range of 110V to 140V. Any output can be achieved within the specified range. The unit operates from 115/230VAC at 3000W or 3PH 208VAC at 5500W 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 power supply will maintain the output voltage within +/-2% of nominal.

In switch machine applications, high power draw only lasts for the time it takes to move the switch. The peak power rating of the Trilogy Products Switch Machine Power Supply is defined as 10 seconds at 50A (27A for 115/230 operation) every 1 minute. The intention is for one switch machine power supply to be able to provide 50A (27A) of peak current.

The Switch Machine Power Supply offers operational redundancy when paired with a second unit. This allows for the entire load to be taken by one supply in the event of a failure of the other supply. In normal operation, each supply shares the load. This is accomplished through auctioneering diodes and a potentiometer.

There are several protection features to insure safe operation. These include input under-voltage lockout, over current limit overload protection and over-voltage protection. The power supply is designed to protect itself from overload currents and it is designed to protect the load from internal supply failures. The unit will reduce output voltage when a power over 100% of maximum or greater is required. If the fault condition clears, the power supply will automatically begin normal operation. If it does not clear, the power supply will continue to fold back to maintain maximum output power. Should the fold back voltage reach 100V for 30 seconds, the power supply will shut down.

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 green LED indicates proper supply operation. Three red LED's representing under voltage (UV), over voltage (OV) and over load (OL) 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 barrier strip terminals.

ELECTRICAL SPECIFICATIONS

Input Voltage	115/230VAC or 3PH 208VAC
Output Voltage	110V-140V
Maximum Peak Output Power	3000W or 5500W
Min Operating Temperature	-30°C
Max Operating Temperature	+70°C
Alarm Relay Contact Rating	5A
Output Voltage Regulation	+/-2%

MECHANICAL SPECIFICATIONS

Height	10in (6U)
Width	19in
Depth	22in

ORDERING INFORMATION

SiPS-110V-3000-115
SiPS-110V-3000-230
SiPS-110V-5500-208