

FEATURES

- Operates from 95 to 253 VAC input
- 11V-14V or 24V-32V output
- 600W (12V) or 700W (28V) Output Power
- Power Factor Correction
- 85% Efficient
- Operational Redundancy and Intelligent Load Sharing
- Operates from -30C to +70C
- No Cooling Fans Required
- AAR Binding Post AC and DC Terminals
- Meets AREMA 11.5.1 for Class C equipment



OVERVIEW

The Trilogy Products SiPS-xxV-x00W-LS is a 19" rack mountable, high-efficiency switch-mode power supply that comes standard in either 11V to 14V or 24V to 32V output voltage range, adjustable via potentiometer on the supply's front panel. The unit operates from a wide input voltage range of 95VAC to 253VAC, in ambient temperatures of -30C to +70C without the need for cooling fans. Over the temperature and input voltage range specified, and with load transitions from 10% to 100%, the SMPS will maintain its output voltage within +/-1% of nominal. The output features low ripple voltage of less than 140mVp-p.

REDUNDANCY AND LOAD SHARING

The power supply 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. Two supplies can also be connected via CAT5 cable which enables active load sharing.

PROTECTION FEATURES

The power supply has several protection features to ensure safe operation. Over-current and over-voltage hard shutdown limits are provided, as well as over-current voltage fold-back for startup into highly capacitive loads. Faults are monitored and latched by the monitoring circuitry, however for transient fault conditions the supply will automatically restart after the fault condition has been removed.

FAULT INDICATION

A dry contact is provided that is closed when the supply is in normal operation, and open when the supply is experiencing a fault condition. This can be used to indicate trouble remotely to a SCADA or other monitoring system.

FRONT-PANEL INTERFACE

The power supply provides the following controls and indications via the front-panel:

- Large power on/off switch
- Replaceable input protection fuses
- Digital display of supply voltage, bus voltage, and output current
- Green LED indicating supply health
- Red LEDs indicating under voltage (UV), over voltage (OV) and over current (OC)
- RESET button to clear latched fault condition(s)
- LAMP TEST button to test displays and indicators
- RJ45 connections for load-sharing and firmware updates

ELECTRICAL SPECIFICATIONS

Input Voltage _____ 95-253 V_{AC}
 Output Voltage (12V version) _____ 11V-14V
 Output Voltage (28V version) _____ 24V-32V
 Output Voltage Regulation _____ +/- 1%
 Maximum Output Power @ 11V-14V _____ 600W
 Maximum Output Power @ 24V-32V _____ 700W
 Operating Temperature Range _____ -30 to +70 °C
 Alarm Relay Contact Rating _____ 5A @ 250VAC / 30VDC
 Output Ripple Voltage _____ <140mVp-p
 Fault Limits (12V version) 9V UV, 15.2V OV, 55A OC
 Fault Limits (28V version) 22V UV, 34V OV, 28A OC

MECHANICAL SPECIFICATIONS

Dimensions _____ 19in W x 18in D x 7in H
 Weight _____ 20 lb

ORDERING INFORMATION

SiPS-12V-600W-LS _____ 11V-14V, 50A Output
 SiPS-28V-700W-LS _____ 24V-32V, 25A Output