

SSCI-890 Power Supply P/N 94048

The SSCI-890 Power Supply is an N+1 redundant, current sharing, hot-swappable AC to DC power supply. It is a COTS Modular Design with user replaceable LRUs. The power supply has On/Off Circuit Breakers mounted on the front panel of each LRU. LRU Status Indicators are visible on the front panel. The Power Supply is 3U high (EIA standard) and 19" Rack Mountable with provisions for slide mounting. The power supply and I/O connections are shown on Outline drawing 25077. In this configuration, there are two LRU power units mounted in the left and right slots. The center LRU is a controller unit.

The power units are identical, each capable of supplying full system power. These units have front panel LED's which give LRU status. A supply can be replaced with power "on". The other LRU will continue to support full system operation. It is recommended, but not required, that the circuit breaker of the LRU to be replaced be turned off before removal. Front panel insertion – ejection handles are provided for easy installation or removal of the supplies.

The center LRU is the system controller. This unit monitors the input line and the composite DC outputs. If there is a line problem or a DC output problem, the system will not operate properly. This unit also contains a battery charger and timing control to support system shutdown during brownout conditions. There are two input control potentiometers which allow adjustment of the input line detection circuit. One adjustment varies the level at which a brownout will be detected and the other adjusts the time the anomaly must last to be detected. If an error is detected, a relay closure is sent to the computer.

FEATURES

- N+1 redundant
- Hot swappable
- Modular design with user replaceable LRU's
- Front panel status indicators
- Rack mountable with option for slides



SPECIFICATIONS

INPUT

Voltage 90-240 VAC, Single Phase

Frequency 47-63 Hz PFC Input 0.95 minimum

Harmonic Content Designed to meet MIL-STD-1399

Brownout ride-through 50ms. minimum

OUTPUT

5 Volts Logic power; 5 VDC @ 100 A; Adjustable +/-10% 5 Volt memory; 5 VDC @ 3A; Adjustable +/-10% Dual 12 Volts; +/-12 VDC @ 1.5A Common Ground

All DC commons isolated from chassis ground

Power rating 551 watts

Efficiency: 65% minimum (75% typical) @ full load Ripple: 100mv peak to peak for 5 VDC Outputs,

200mv peak to peak for other voltages measured at 25MHz bandwidth

over temperature range.

Over current protection: Short Circuit and Over Current Protected

Current sharing: Automatic

Over voltage protection: 105-130% of nominal voltage

Current limiting: 115% minimum of rated current @ nominal voltage (auto recovery)

Load regulation: 1% maximum (0.5% typical) per output Line regulation: 0.5% maximum (0.2% typical) per output

STATUS INDICATORS

Controller LRU: AC OK, DC OK

Power LRU: AC OK, DC OK, FAN OK

PHYSICAL

Dimensions: 19" Rack Mount Chassis, (3U) 5 1/4"H x 19.5"D)

Weight: 42 lbs

Cooling: Internal fans. Intake front and exhaust rear.

Slide mounting pattern: Compatible with Standard Precision (formerly Accuride) P/N 3307-22

Test Points All DC Outputs on Controller Front Panel Adjustments +5V Logic; +5V Memory; +10%, -5%

Battery 12V 7AH (on rear)

Power Connections: (J1 to J6,) 5V Output, 9 pin

(J7) Local Battery, 2 pin (J8) External Control, 12 pin (J9) Local Control, 9 pin (J10, J11) Power Fail, 4 pin (J12, J13) Memory Output, 6 pin (J14 to J16) +/- 12Volt Output, 8 pin

ENVIRONMENTAL

Operating Temperature 0°C to 45°C Storage Temperature -40°C to 60°C

Humidity 0% to 95% Non-Condensing

Note: Unit designed to meet MIL-STD-1399 and MIL-STD-461



West Coast Office