94012-MK119 Power Supply System

The 94012 is a N+1, Hot Swappable, modular design with three user replaceable Line Replaceable Unit’s (LRU’s), Model 94016. All three LRU’s share the load. In the event of loss of one LRU the remaining two can support the full load and the third unit can be replaced, hot-swapped, with power on the system. Features include N+1 redundant, hot-swappable and current sharing, with front panel status indicators and designed to meet the stringent environment requirements.

Features

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

SPECIFICATIONS

**INPUT**
- Voltage: 120 VAC, +/- 10%, 1 phase, per MIL-STD-1399.
- Frequency: 57-63 Hz, per MIL-STD-1399
- PFC Input: .95 minimum
- Harmonic Content: Per MIL-STD-1399

**OUTPUT**
- -12 VDC: 10 AMPS Minimum
- +12 VDC: 33 AMPS Minimum
- +5 VDC: 160 AMPS Minimum
- +28 VDC: 8.6 AMPS Minimum
- Power rating: 1,560 watts
- Efficiency: 65% minimum (75% typical) @ full load
- Ripple: 100 mVolts peak to peak for 5 VDC output, 200 mVolts peak to peak for other voltages measured at 25 MHz bandwidth over temperature range
- Remote sense: 0.5 volts compensation per output
- Over current protection: 110-120% of full load (auto recovery)
- Current sharing: Automatic
- Over voltage protection: 105-130% of nominal voltage (non shutdown, auto recovery)
- 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 SIGNALS
- DC OK
- FAN OK
- Over Temperature

All signals are open collector/open drain TTL compatible. Fault to cause a logic state low.

PHYSICAL
- Dimensions: 19” Rack Mount Chassis, (3U) 5 ¼”H x 22”D
- Cooling: Internal fans. Intake front and exhaust rear.
- Slide mounting pattern: Compatible with Standard Precision (formerly Accuride) part number 3307-22.
- Power Connections:
  - (J1) Input – MS3102R-22-22P
  - (J2) Aux. Output – MS3102R-22-12S
  - (J3) Main output – MS3102R-36-5S
  - (J4) Aux. Output – MS3102R-28-21S
  - (J5) Main ON/OFF – 25 Amp circuit breaker

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