MK119 Line Replaceable Unit (LRU)

The MK119 LRU power supply is a ruggedly built, modified COTS, modular design, Line Replaceable Unit, used in the MK119 Power Supply System Model 94012. Features include N+1 redundant, hot-swappable and current sharing, with front panel status indicators and designed to meet the stringent requirements of life aboard a US Navy warship.

### Features
- N+1 redundant
- Hot swappable
- Modular design for user replacement
- Front panel status indicators on front panel

### 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**: 5 AMPS Minimum
- **+12 VDC**: 17 AMPS Minimum
- **+5 VDC**: 80 AMPS Minimum
- **+28 VDC**: 4.5 AMPS Minimum

- **Power rating**: 790 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: 1/3 Rack Mount Chassis, (3U) 5 ¼”H x 15”D) with guide pins

Cooling: Internal fans. Intake front and exhaust rear.

Connections:

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