

POWER SUPPLY

MULTI-VOLTAGE POWER SUPPLY SYSTEM

- Ground Based Vehicle Radar



This power supply was developed to power a HUM-V mounted radar transmitter and receiver. This system consists of a 19" rack, three (3), hot-swappable, AC/DC converters, each delivering a regulated output of 90A at 42VDC as the main power supplies (Main PS), and two (2) multi-output AC/DC converters, as low voltage power supplies (LVPS).

Features:

- Redundancy with High Field Reliability
- Over and Under Voltage Protection
- Over and Under Load Protection
- Over Temperature Protection
- Front Panel Test Points For Monitoring Output Power
- Modular Design for easy assembly and repair
- Forced Air Cooling Using Internal Fans
- Bi-conversion, SMPS design providing power factor correction (.99 leading), and EMI compliance to MIL-STD-461, and MIL-STD-462

Specifications:

Electrical Specifications

- **Input:**
208/120 VAC, 3 phase, 60Hz
- **Output:**
LVPS: (2 power supplies)
5A @ +5VDC, 0.5A @ -15VDC, 12.0A @ +15VDC,
9.0A @ +28VDC
Main PS: (3 power supplies) 90A @ +42 VDC
- **Efficiency:**
LVPS: 72%
Main PS: 80%

Mechanical Specifications

Size and Weight:

- **Weight:** 90 lbs.
- **Dimensions:** 19" x 7" (4U) x 23.5"
- **Operating Temperature:** 0 to 50°C
- **Operating Altitude:** 0 to 10,000 ft.

Environmental:

- **Operating Temperature:** 0 to 50°C
- **Storage Temperature:** -40 to 68°C
- **Operating Altitude:** Sea Level to 10,000ft
- **Transported Altitude:** Sea Level to 50,000ft

LM-45-PS