

**RF-5051-PS001  
RF-5054-PS001****AC POWER  
SUPPLIES**

*fully compatible and  
functional members of  
the FALCON® Series*

*RF-5000 and FALCON® II*

*RF-5800H tactical*

*Communications families*

The RF-5051-PS001 and RF-5054-PS001 Series of high-performance AC power supplies allows operation of Fallon® II/Falcon® III and RF-5000 Series systems from a VAC input range of 85 to 265 volts in base station, shipboard, or transportable applications.

The RF-5051-PS001 Power Supply provides 28 volts DC at 30 Amps to power up to 840 watts. The power supply uses the same mounting as the RF-5022R/T(E) Receiver/Exciter and is compatible with RF-5000 and RF-5800H family shock mounts and transport packages. RF-5051-PS001 environment specifications match those of the FALCON® family components, providing a system which is reliable even under the harshest of conditions.

The RF-5054-PS001 Power Supply consists of two RF-5051-PS001 units connected in parallel. The RF-5054-PS001 provides power for 400 watt Falcon Series systems. The RF-5051-PS001 has backward-compatible functionality to the RF-5051PS-125, and both RF-5051-PS001 and RF-5051PS-125 may be combined to create an RF-5054-PS001.



### **General/Electrical**

- **Input Voltage**  
85-265 VAC, 47-400 Hz
- **Input Power Factor Correction**  
>95% (85-265 VAC)
- **Input Protection**  
Circuit Breaker
- **Output Voltage**  
+28 VDC  $\pm$  0.5
- **Regulation, Line Load**  
0.2% from low line to high line
- **Ripple and Noise**  
200 MV @ 30A
- **Voltage Stability**  
200 MV drift maximum
- **Efficiency**  
>80%
- **Over-Voltage Protection**  
Set to 28  $\pm$  0.5 VAC
- **Output Current**  
RF-5051-PS001: 30 Amps maximum  
RF-5054-PS001: 60 Amps maximum
- **Inrush Current**  
RF-5051-PS001: 4 Amps for 10 ms  
RF-5054-PS001: 8 Amps for 10 ms
- **Hold Time**  
RF-5051-PS001: 500 ms with 0.5 Amp load  
RF-5054-PS001: 1 sec. with 0.5 Amp load
- **Overload Protection**  
RF-5051-PS001: Out. current limit 33 Amps  
RF-5054-PS001: Out. current limit 66 Amps
- **Output Protection**  
Output is automatically protected from short and misfiring

### **Mechanical/Environmental**

- **Cooling**  
Conduction to outside heat sink, forced convection
- **Temperature**  
Operating:  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ ;  
Storage:  $-60^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$
- **Altitude**  
MIL-STD-810F
- **Humidity**  
MIL-STD-810F, 95%
- **Shock/Vibration**  
MIL-STD-810F
- **EMI**  
MIL-STD-461E
- **Size**  
RF-5051-PS001: 5.5H x 7.5W x 12.8D in  
(14H x 19.1W x 32.5D cm)  
RF-5054-PS001: 5.5H x 15.0W x 12.8D in  
(14H x 38.1W x 32.5D cm)
- **Weight**  
RF-5051-PS001: 17.3 lb (7.8 kg)  
RF-5054-PS001: 34.6 lb (15.7 kg)

### **Features/Benefits**

- High reliability
- Configurations for 50, 125 and 400 watt systems
- Conservative ratings
- Rugged package compatible with the FALCON® Series RF-5000 and FALCON® II RF-5800H Tactical Transceiver Systems
- **Ground Fault Interrupters**  
CISPR221EN55022 Level B
- **Allows Generator Operation**
- **Supports Line/Line Operation**
- **Self Fault Recovery**
- **Fault Indicator**

Specifications are subject to change without notice.