

# assured communications \*

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



fully compatible and

functional members of

the FALCON® Series

RF-5000 and FALCON® II

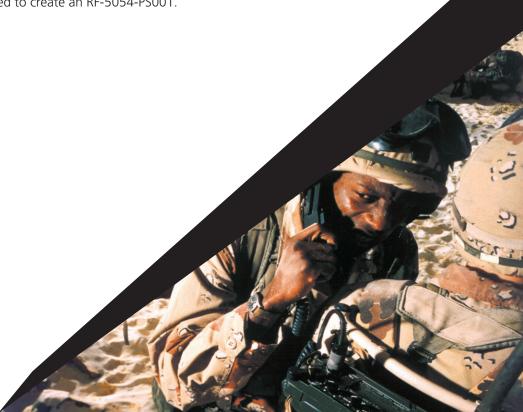
RF-5800H tactical

**Communications families** 

The RF-5051-PS001and 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-5051-PS-125 may be combined to create an RF-5054-PS001.



## Specifications for the RF-5051-PS001 and 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 ± 0.5

Regulation, Line Load0.2% from low line to high line

Ripple and Noise 200 MV @ 30A

Voltage Stability200 MV drift maximum

■ Efficiency >80%

Over-Voltage Protection Set to 28 ± 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 misfirting

## Mechanical/Environmental

Cooling

Conduction to outside heat sink, forced convection

Temperature

Operating:  $-40^{\circ}$ Cto  $+70^{\circ}$ C; Storage:  $-60^{\circ}$ C to  $+90^{\circ}$ 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.

