

## **assured**communications™

## RF-5834H-PA001 **400 WATT HF POWER AMPLIFIER**

a fully solid-state design, modular construction, and conservatively rated components combine to provide a high level of reliability The Harris 400 watt Power Amplifiers increase the output of the FALCON® II RF-5800H-MP and AN/PRC-150(C) manpack transceivers to 400 watts PEP/Average.

The RF-5834H Power Amplifier operates in applications where medium-power, medium-range communications are required. Applications include mobile, boat, or base station installations for general-purpose HF-SSB voice and data communications.

Continuous coverage is provided over the 1.6 to 30 MHz range. The power amplifier section is a broadband design requiring no tuning or adjustment.

When used with the RF-382A Series Antenna Coupler, the output of the power amplifier is automatically matched to the specified antenna and requires no special operator procedures.

Power output is adjustable via the transceiver front panel or remote control.

Built-in self-test features permit operators or maintenance personnel to check the transceiver and associated power amplifier performance down to the module level. Fault conditions are indicated on the transceiver's front-panel display.

The robust design and construction of the Power Amplifier guarantee continuous high performance and reliability in the most severe environments.





## Specifications for the RF-5834H-PA001

General

**Frequency Range** 1.60000 to 29.99999 MHz

**Modes of Operation** J3E (single sideband, upper or lower, suppressed carrier telephony);

H3E (compatible AM single sideband plus full carrier telephony);

J2A MCW (single sideband suppressed carrier keyed tone).

**RF Input/Output Impedance** 50 ohms nominal, unbalanced

**Power Input** +26.4 VDC (per MIL-STD-1275) @ 55 Amps., maximum

**Temperature Range** Continuous Duty: -40°C to +55°C;

Voice and High-Speed Data: -40°C to +70°C

**Shock/Vibration** MIL-STD-810D

**Leakage** MIL-STD-810D (1 meter depth) **Humidity** MIL-STD-810D (0 to 95%)

**Size** 12.0W x 16.4D x 7.7H inches (30.5W x 41.7D x 19.6H cm)

**Weight** 45.0 lb (20.5 kg)

**Power Amplifier** 

**Power Output** 400 Watt PEP/average into 50 ohms

(Variable level control from transceiver to -15 dB maximum)

**RF Drive Requirements** Nominal 100 mW (+20 dBm)

**Intermodulation Distortion** –30 dB below PEP

**Harmonic Output** –40 dB

Accessories

**RF-382A** Fast-Tune Antenna Coupler

**RF-5074VSM-03** Vehicular Shock Mount for 400W PA Site Spares Kit for the RF-5834H-PA001

SB-V Whip Antenna SeriesRF-1936 NVIS Antenna SeriesRF-1912 Dipole Antenna Series

 10286-0900-01
 Low Pass Filter Kit for Vehicular Adapter

 10286-0900-02
 Low Pass Filter Kit for Base Station Adapter

 10535-0720
 RF-5834H to RF-5800H/PRC-150 Control Cable

 10181-9824
 RF-5834H to RF-5800H/PRC-150 RF Coax Cable

**10181-9828** RF-5834H Vehicle DC Power Cable **10181-9834** RF-5834H to RF-5054PS DC Power Cable

**Systems** 

RF-5800H-V003 400-Watt Vehicular Adapter
400-Watt Base Station Adapter
400-Watt Mini-Transit Case Adapter



FALCON is a registered trademark of Harris Corporation. Specifications are subject to change without notice.

