

RF-5034PA-400E
RF-5834H-PA
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 respective Receiver-Transmitters to 400 watts PEP/Average. The RF-5034PA-400E is used with FALCON™ AN/PRC-138 and RF-5022R/T(E) Transceivers, while the RF-5834H-PA is compatible with FALCON™ II RF-5800H-MP transceivers, as well as the AN/PRC-138 and RF-5022R/T(E) transceivers.

The RF-5034PA/RF-5834H-PA 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.

When used with the FALCON or FALCON II series transceivers, the power amplifier provides an HF-SSB radio system fully compatible with most existing HF radio systems. Continuous coverage is provided over the 1.6 to 30 MHz range in 10 Hz synthesized steps.

The power amplifier section is a broadband design requiring no tuning or adjustment.

When used with an automatic antenna tuner such as 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.

The output of the RF-5034PA-400E and RF-5834H-PA is 400 watts PEP/Average. Power output is adjustable over a 15 dB range via front panel or remote control.

The RF drive requirements for full 400 watts PEP/Average is 100 milliwatts from the Receiver-Transmitter.

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



Specifications for the RF-5034PA/RF-5832H-PA

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) @ 45 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%)
MTBF	Greater than 3000 hours
MTTR	Less than 30 minutes to the module level
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

	When used with appropriate transceiver
Power Output	400 watts 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

Classification

RF-5034PA-400E	RF-5022R/T(E), AN/PRC-138 compatible 400 watt power amplifier
RF-5834H-PA001	Falcon II (RF-5800H-MP) 400 watt power amplifier

Accessories

RF-382A	Fast-Tune Antenna Coupler
RF-5074 VSM	Vehicular Shock Mount for 400W PA
RF-5034PA-E/SSK	RF-5034PA Site Spares Kit
SB-V16	16 ft Whip Antenna Series
RF-1936	NVIS Antenna Series
RF-1912	Dipole Antenna Series

Applications

RF-5000V-400E	RF-5022R/T(E)-based 400-Watt Vehicular System
RF-5000B-400E	RF-5022R/T(E)-based 400 watt Base Station System
RF-5000TM-400E	RF-5022R/T(E)-based 400 watt Mini-Transit Case System
RF-5800H-V003	FALCON II 400-Watt Vehicular Adapter
RF-5800H-B003	FALCON II 400-Watt Base Station Adapter



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Specifications are subject to change without notice.



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