

**RF-5032PA-125E
RF-5832H-PA****125 WATT HF****POWER AMPLIFIER***guarantees continuous**high performance and**reliability in the most**severe environments*

The Harris 125-Watt Power Amplifiers increase the output of their respective Receiver-Transmitters to 125 watts PEP/Average. The RF-5032PA-125E is used with the FALCON® AN/PRC-138 and RF-5022R/T(E) Receiver Transmitters, while the RF-5832H-PA is used with the FALCON® II RF-5800H-MP Receiver-Transmitter, as well as the AN/PRC-138 and RF-5022R/T(E).

The RF-5032/RF-5832 Power Amplifier operates in applications where medium-power, medium-range communications are required. Typical applications include mobile, boat, or base station installations for general purpose HF-SSB voice and data communications.

When used with an appropriate transceiver, the power amplifiers provide an HF-SSB radio system fully compatible with most existing HF radio systems. Continuous coverage is provided over the 1.6 to 30 MHz frequency range.

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 RF-5032/RF-5832 is automatically matched to the specified antenna and requires no special operator procedures.

Built-in self-test features permit operators or maintenance personnel to fully check the R/T and associated power amplifier performance down to the module level. Fault conditions are displayed on the transceiver's front-panel display.

The output of the RF-5032PA-125E and RF-5832H-PA is 125 watts PEP/Average. Remote or front-panel control provides up to 12 dB power output adjustment.

The RF drive requirements for full 125 watts PEP/Average is 100 milliwatts from the associated receiver-transmitter.



Specifications for the RF-5032PA-125E/RF-5832H-PA

General

Frequency Range	1.600000 to 29.99999 MHz
Modes of Operations	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 ohm nominal, unbalanced
Power Input	+26.4 VDC nominal, @15 Amps., maximum
Temperature Range	-40°C to +70°C
Shock/Vibration	MIL-STD-810E
Leakage	MIL-STD-810E (1 meter depth)
Humidity	MIL-STD-810E (0 to 95%)
MTBF	Greater than 3000 hours
MTTR	Less than 15 minutes to the module level
Size	7.5W x 10.0D x 5.5H inches (19.0W x 25.5D x 14.0H cm)
Weight	12.8 lbs (5.8 kg)

Power Amplifier*

Power Output	125 watts PEP/average into 50 ohm (Variable level control from transceiver to -12dB maximum)
RF Drive Requirements	Nominal 100 mW (+20 dBm)
Intermodulation Distortion	-30 dB from either tone of a two-tone envelope at 125 watts PEP
Harmonic Output	-40 dB

*When used with appropriate transceiver.

Classification

RF-5032PA-125E	RF-5022R/T (E), AN/PRC-138 compatible 125 Watt Power Amplifier
RF-5832H-PA001	FALCON® II (RF-5800H-MP) 125 Watt Power Amplifier, CARC Green 383

Accessories

RF-382A	Fast-Tune Antenna Coupler
RF-5071VSM	Vehicular Shock Mount
RF-5051PS	Power Supply
SB-V16	16 ft Whip Antenna Series
RF-1936	NVIS Antenna Series
RF-1912	Dipole Antenna Series
RF-5032PA-E/SSK	Site Spares Kit

Applications

RF-5000V-125E	RF-5022R/T(E) 125 Watt Vehicular System
RF-5000B-125E	RF-5022R/T(E) 125 Watt Base Station System
RF-5000T-125E	RF-5022R/T(E) 125 Watt Transportable System
RF-5200V-125EA	AN/PRC-138 125 Watt Vehicular System
RF-5800H-V004	FALCON® II 125 Watt Vehicular Adapter
RF-5800H-B004	FALCON® II 125 Watt Base Station Adapter



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Specifications are subject to change without notice.



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