

FEATURES

- Available for VHF through X-Band
- 5 Watts to 250 Watts Output
- Telemetry or Video Applications
- Narrow and Wideband Models
- Available for 12 and 28 Vdc and
115/230 Vac Operation



Typical 20 Watt Housing

Power Amplifiers are used to boost the transmission range of a RF signal where a higher power transmitter cannot be obtained or larger antenna size cannot be used to provide the required gain. Applications include Airborne and Ground Telemetry, Data, or Video links to terrestrial or space receiving sites. Linear and Class C designs are available.

Amplifiers operating at 1,000 MHz or higher include internal isolators to protect the amplifier circuitry for open or shorted load conditions. Isolators and Low Pass Filters for units operating below 1,000 MHz are optional.

Amplifiers are available with up to 250 watts output in the VHF, UHF, L, S, and in lower output power models for C, and X-Bands. Housing sizes and output power capabilities are application specific and vary depending on input/output power requirements, bandwidth, and signal type. High power models are available in NEMA style outdoor, weather-resistant enclosures.

Standard housing sizes available include:

PA7	7 Cubic Inches
PA15	15 Cubic Inches
PA36	36 Cubic Inches (shown)
PA54	54 Cubic Inches

Other sizes to meet specific application requirements are available.

Physical size dependant on Output Power, Operating Frequency, and Bandwidth. Contact factory or nearest Representative with your specific requirements. Amplifiers may be co-located with the corresponding transmitter or mounted on the transmitter if housing sizes are compatible. Connector types and configurations can be customer-specified. In most cases, heatsinking is required.



SPECIFICATIONS

Input Characteristics

RF Input Power (Drive): +10 dBm to +40 dBm
(typical)
Input VSWR: 2:1 max., 50 ohms reference
Input Frequency: 30 MHz to 14 GHz
Power Supply: 12 or 28 Vdc,
115/230 Vac 50/60 Hz
(dc-powered models include internal voltage
regulators and reverse polarity protection)

Output Characteristics

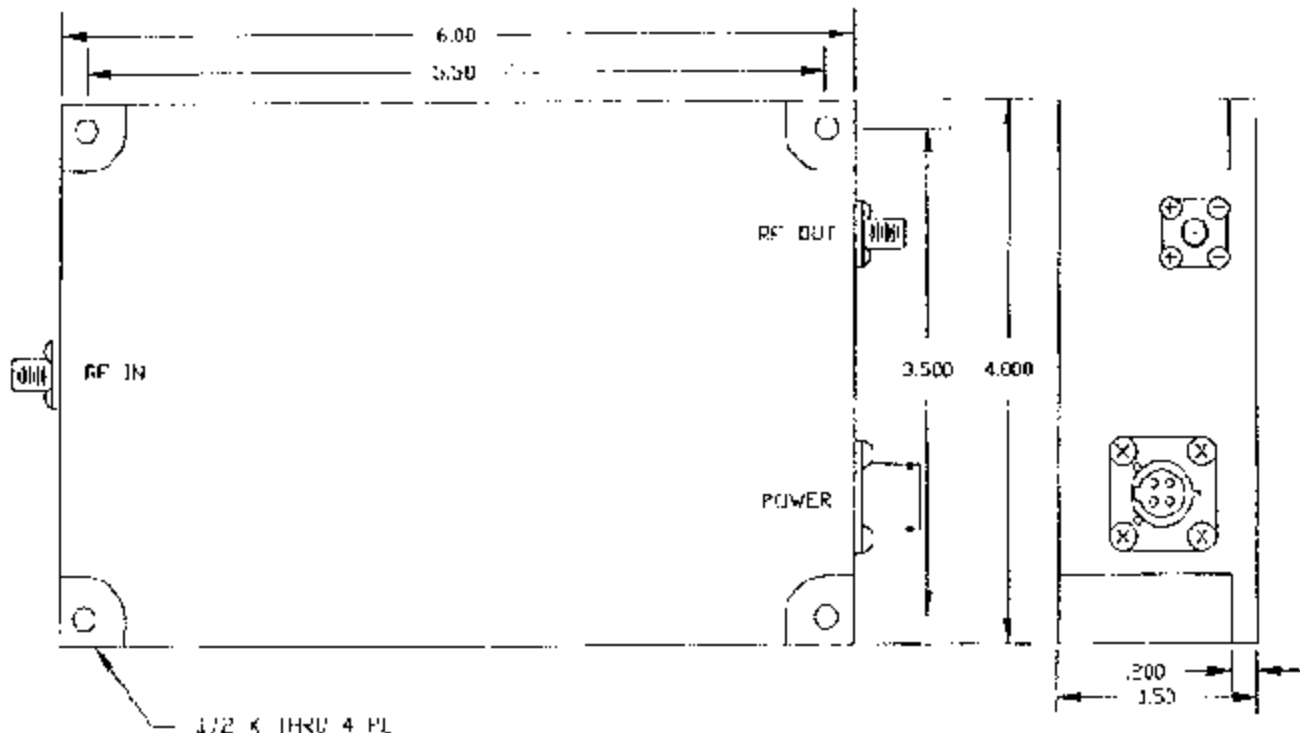
RF Output Power: 5 to 250 Watts
(frequency/bandwidth dependant)
Output Impedance: 50 ohms
Output Mismatch: no damage operating into
short or open load

Mechanical Characteristics

Size: application/power level specific
Housing Style: "brick" or weatherproof NEMA
enclosures
RF Connectors: customer-specified, SMA,
TNC, BNC, "N"
Power & Other Connectors: customer-
specified Bendix style

Environmental Specifications

Temperature Range: 0 to +50°C or -20°C to
+71°C. (extended
temperature and heaters available)
Humidity: up to 95% non-condensing
(pressurizing provisions with NEMA enclosures)



Typical Power Amplifier Outline Drawing

