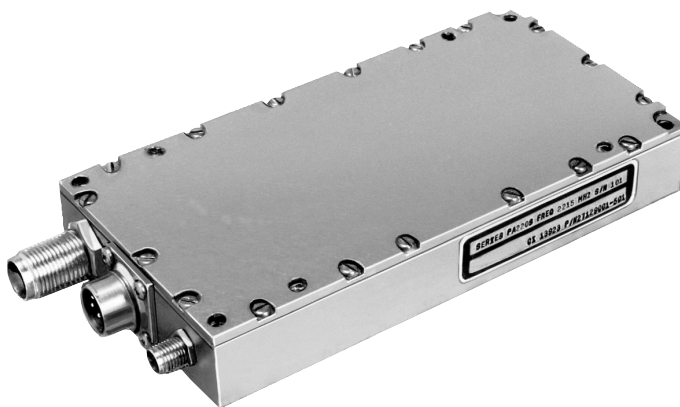


PA220S
Power Amplifier
Airborne Telemetry Products



PA220S enclosures are milled nickel-plated aluminum alloy. The connector configuration shown in the outline drawing is standard; customer-specified configurations will be provided as an option.

- 20 Watt Output from Two-Watt Transmitters
- Video or Telemetry Applications
- Useable with Single-frequency (T602) and Multifrequency (ST402, ST802 Synthesized) Transmitters
- Direct-Mount compatibility with T602, ST802, ST402 Transmitters
- State-of-the-Art Design and Construction
- High-Efficiency

Line Regulation:	All units have internal voltage regulators and are reverse polarity protected
Power Supply Voltage:	28 ±4 Vdc
Input Current:	6 amps max at 20 watts output
RF Input Power Range:	2 to 4 watts for specified RF output power
RF Input Impedance:	50 ohms
Frequency Range:	2200 MHz to 2300 MHz 2300 MHz to 2400 MHz



communications

ELECTRICAL SPECIFICATIONS

(continued)

Output Characteristics

RF Power Output:	20 watts minimum
Output Impedance:	50 ohms
Performance Bandwidth:	3 dB bandwidth is 150 MHz; simultaneous usable bandwidth is 100 MHz; wider bandwidths are optional
Output Mismatch Capability:	All units have internal output isolators ensuring performance without PA damage when operating into any output load condition, up to $\infty:1$ VSWR
Spurious Emissions:	-68 dB relative to carrier.

MECHANICAL SPECIFICATIONS

Size:	See outline drawing
Weight:	12 ounces maximum
Connector Configuration:	DC Power Input Connector: Viking VR514AG15, Mate: VP514CE15 Pin Connections: A. +28 V input B. +28 V input C. Power Return and Chassis D. Power Return and Chassis E. No Connection

Note: A and B are common, C and D are common.

RF Input Connector: SMA Type, Mate: OSM 501-3

RF Output Connector: TNC Type, Mate: GRFF 4000-0009

ENVIRONMENTAL SPECIFICATIONS

Baseplate Temperature: -20°C to +71°C, (extended range available as an option.)

QUALITY CONTROL

The PA220S Power Amplifier is manufactured under Quality Control procedures accordant with ISO 9001 and MIL-Q-9858A. Each assembled unit is fully tested to a comprehensive Acceptance Test Procedure that includes full performance testing at thermal extremes.

Through the heritage of Aydin Vector/Telemetry, L-3 Communications Telemetry-East has supported numerous Hi-Rel aerospace programs requiring exhaustive component screening, preconditioning and selection procedures. Hi-Rel procedures or specific customer-generated procedures can be invoked during the manufacture of the PA220S Power Amplifier.

ORDERING INFORMATION

When ordering, specify model number and exact operating frequency band in Megahertz.

For special applications or additional information, contact L-3 Communications Telemetry-East, Newtown, PA or your nearest L-3 Communications Telemetry-East Sales Representative.

PA220S Outline Drawing

