



LPA-9600/9500 1 kW/500 Watt Solid State Linear Power Amplifier Product Information Sheet



The **LPA-9600 (1 kW PEP/AVG)** and **LPA-9500 (500 Watts PEP/AVG)** linear power amplifiers combine solid state RF power amplification and microprocessor technology to produce reliable continuous duty HF power. The **LPA-9600** and **LPA-9500** interface with the RT-9000() or RT-2400 Transceivers and T-9400 Exciter. The units operate in the frequency range of 1.6 to 30 MHz and deliver rated output into a 2 to 1 VSWR over the full temperature operating range. The **LPA-9600** uses four amplifier/power supply modules each capable of producing over 300 watts. In combination they deliver a very conservative 1000 Watts of PEP or average power. The **LPA-9500** uses two modules to deliver a conservative 500 Watts of power. The unique approach of combining the power supplies and amplifiers in modular form produces considerable redundancy and protection against catastrophic failures. The unit is smaller and much lighter than the traditional amplifiers and power supplies contained in separate units.

The amplifier operates from 115 or 230 VAC (50 to 60 Hz) and is easily transported due to the lightweight and single unit configuration. It is extremely rugged and withstands temperatures up to 65°C while operating at a 100% duty cycle. Forced air cooling, under microprocessor control, is utilized to maintain safe device operating temperature.

The **LPA-9600** provides selectable power of 1 kW or 500 Watts and both units allow bypass operation. Also provided on each unit are status indications of power, individual amplifier voltages and currents. The back lit liquid crystal display indicates the specific function selected and BITE status.

Sophisticated BITE diagnostics, status monitoring and routine housekeeping are all under microprocessor and software control. In the event of malfunction the amplifier automatically selects the next lower safe operating level, flashes a warning light and displays the cause of the malfunction on the LCD. If there is more than one failure, detail diagnostics may be obtained by use of the keyboard. With the aid of these diagnostics and a complete modular concept the unit is quickly placed back in service with no need for special test equipment. The final unit alignment is limited to power level adjustments.



LPA-9600/LPA-9500 1 kW/500 Watt

Solid State Linear Power Amplifier

Product Specifications

LPA-9600 (1kWatt)
LPA-9500 (500 Watt)

Sunair P/N: 8105001250
Sunair P/N: 8116001256

NSN: 5996-01-334-2955
NSN: not assigned

GENERAL

POWER OUTPUT: (LPA-9600) 1000 W PEP and Average
(LPA-9500) 500 W PEP and Average

DUTY CYCLE: Continuous

FREQUENCY RANGE: 1.6 to 30 MHz

INTERMODULATION DISTORTION: 36dB below PEP

HARMONIC DISTORTION: 60dB below PEP

BAND CHANGE TIME: 10 msec maximum

OUTPUT IMPEDANCE: 50 ohms unbalanced

LOAD VSWR: Rated power at 2 to 1. Reduced power up to 3 to 1. Protected cut off above 3 to 1.

INPUT VSWR: 2 to 1 Maximum

INPUT VOLTAGE: 115 or 230VAC (+-15%)

Single Phase 50 to 60 Hz

INPUT POWER: (LPA-9600) 4,500 VA typical (including exciter)

(LPA-9500) 2,000 VA typical (including exciter)

INDICATOR: Power on, Fault, Metering, and Liquid Crystal Readout

METERING: Forward power, Reflected power and PA voltages and currents.

DIMENSIONS: Inches (cm): 17.88 W (45.42) x 19 D (48.26) x 15.75 H (40.01).

WEIGHT: (LPA-9600) 90 lbs. (40.8 kg)

(LPA-9500) 70 lbs. (31.5 kg)

MTBF: 6,900 hours (estimated)

MTTR: 30 minutes

DIAGNOSTICS: Microprocessor controlled with English Language Readout (BITE).

ENVIRONMENTAL

TEMPERATURE: OPERATING: -30°C to +65°C

STORAGE: -40°C to +85°C

HUMIDITY: Mil-STD-810F, Method 507.4, Proc I

VIBRATION: Mil-STD-810F, Method 514.5

ALTITUDE: 0-10,000 feet

Specifications subject to change without notice.



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