

PA8100 SERIES (500 W & 1 kW)

PA8105 500 WATT
Part Number 634797-00

PA8109 1 kW
Part Number 608690-00

- Rugged Design Incorporating MOSFET Amplifiers
- Ideally Suited to Naval Co-site Environment
- Service Information Available via Diagnostic Port
- Easy Access for Maintenance and Servicing



PA8105 500 W Power AMP Front Cover Panel



PA8190 1 kW Power AMP Front Cover Panel

GENERAL

Frequency Range

- 1.5 MHz to 30 MHz

RF Output Power (Class AB Mode)

- 1 kW Amplifier: 1 kW \pm 1 dB into <1.2:1 VSWR, >600 W into 2:1 VSWR
- 500 W Amplifier: 500 W \pm 1 dB into <1.2:1 VSWR, >300 W into 2:1 VSWR
- Power reduction down to 1 W in 1 dB steps

Harmonics

- All better than <-63 dBc

Forward Intermodulation Products

- >38 dB (typically >43 dB below PEP)

Required Power (48 VDC)

- 1 kW: 3600 W typical, 4800 W max
- 500 W: 2000 W typical, 2400 W max

ENVIRONMENTAL/PHYSICAL

Temperature

- MIL-STD-810F
 - Operation: -5°C to +49°C
 - Storage: -30°C to +71°C
- Operation to +55°C at reduced duty cycle or AM services

Humidity

- MIL-STD-810F

Vibration

- MIL-STD-167-1 (Ships) Type 1

Shock

- MIL-STD-883C, 30 g, 25ms (in a shock mounted cabinet)

EMC/EMI

- MIL-STD-461E

Size (H x W x D)

- 1 kW 14 x 19 x 22 in (355 (8U) x 483 x 560 mm)
- 500 W 10.5 x 19 x 22 in (267 (6U) x 483 x 560 mm)

Weight

- 1 kW: 143 lbs (65 kg)
- 500 W: 88.2 lbs (44 kg)

OPTIONS

Receiver/Exciters

- MSN8100 Series Software Defined Radio
- TMR5000/6000 Series Receiver/Exciter

Transmit Antennas/Antenna Coupling Units

- Whip Antennas via ACU51 fast antenna tuning unit
- AS6000 loop antennas
- Broadband antennas via CA6000 broadband combiner system

PA8100 SERIES (500 W & 1 kW)



PA8190 1 kW Power AMP Front without Cover



PA8105 500 W Power AMP Front without Cover



PA8190 1 kW Power AMP Rear



Power Amplifier Module