

180W 869-894MHZ RF POWER AMPLIFIER USER MANUAL

1. GENERAL DESCRIPTION

The 180W 869-894MHz Power Amplifier is a high power amplifier (PA) that incorporates LDMOS technology to provide high efficiency and rugged operation. The PA features a compact housing, alarm display LEDs and cooling fan.

2. INSTALLATION

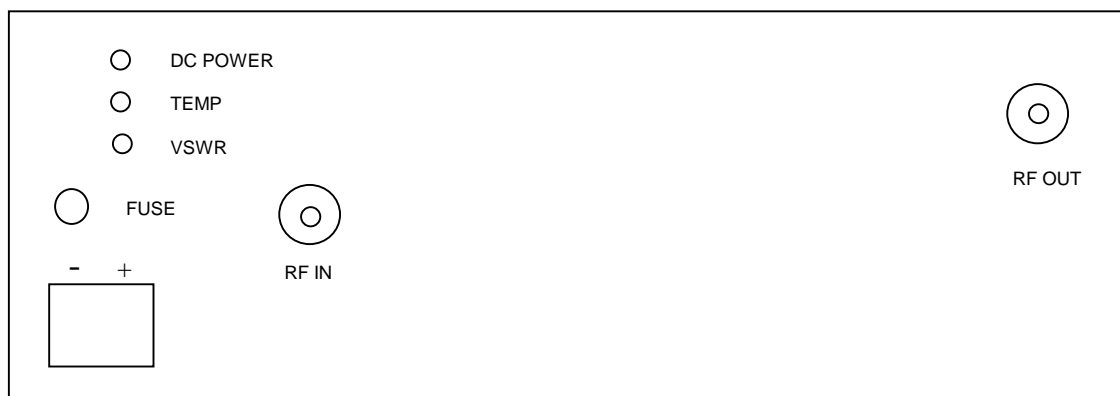


Figure 1. Front Display and Connections

- Connect the PA's RF IN port to a RF source.
- Terminate the PA's RF OUT port with a 180W 50Ohm load.
- Connect a DC power supply source to the terminal block labeled + -.
- Turn on the DC power supply and set for 26V. The PA's DC POWER LED and cooling fan should be on.
- Turn on the RF signal. Monitor the input and output power. Increase the RF input level gradually until 180W is obtained at the PA's RF OUT port. The RF input level should remain less than 20W.

3. SPECIFICATIONS

Electrical

Frequency Range	869-894 MHz
Output Power	180 Watts max
ALC Settling Time	100ms max to within ± 1 dB of final value
Input Power	20 Watts max

Input Return Loss	-10 dB
Harmonics & Spurious	Better than -70dBc
Stability	Less than 3:1 VSWR
DC Supply Voltage	26 V \pm 0.5 V
Input DC Power	520 Watts
RF Load VSWR	Full power at better than 2:1 VSWR

Environmental

Operating Temp:	-30 to 45°C
Humidity:	0-95% relative humidity, no condensing
Operating Altitude	0-12,000 feet

Mechanical

Cooling	Single external fan, forced air along the sides
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