

OPERATIONAL DESCRIPTION

1. DESCRIPTION

a) Individual Stages

The Power Amplifier is divided into the following sections:

- Splitter Stage: includes DC supply regulation, display LEDs, splitter and temperature sensor.
- Amplification Stage: consists of two 125W final amplifier pallets.
- Combiner Stage: consists of VSWR monitor circuitry, combiner, circulator and low pass filter.

b) Overall Lineup

The RF input is fed to a 3dB splitter and amplified by 2 final PA pallets. The 2 signals are then recombined and routed to a circulator and then a low pass filter before going out to the PA's output port.

A temperature sensor locating on the driver board monitors the PA's heat sink temperature. Temp LED display will turn on when the heat sink temperature is exceeded 65°C. The PA's Output VSWR level is monitored at the circulator load. VSWR LED display will turn on when the output VSWR is approximately 3:1.

Signals	LED	Condition
DC Power	Green	DC power is on
VSWR	Red	Greater or equal to 3:1 VSWR at the output
Temp	Red	Ambient Temp is at least 65°C

Table 1. LED Display

