

## **DESCRIPTION OF PRODUCT:**

The H100 amplifier is designed for trunking and conventional repeater applications requiring high duty cycle. The H100 amplifier operates from RF power sources of 250 milliwatts up to 25 watts. The amplifier consists of an input attenuator, a predriver amplifier, a microprocessor control circuit, and two stages of amplification followed by a 7-pole distributed low-pass filter and associated control circuitry.

The H100 amplifier has a microprocessor control board that maintains a constant output power under varying signal input and output load conditions. A system functional block diagram of the Model H100 amplifier is contained in section 4 of this manual. The H100 amplifier (see block diagram figure 4-2 in manual) is a linear, single channel amplifier that operates in the frequency band from 450 MHz to 470 MHz.

The amplifier specifications are listed in the table 1-2 of operating manual. Each amplifier is a self-contained plug-in module and is functionally independent of other amplifier modules. The amplifier modules are designed for parallel operation to achieve high peak power output, and for redundancy in unmanned remote locations. Each amplifier in the system can simultaneously transmit carrier frequencies, a total power output of 100 Watts per amplifier.