



POWER AMPLIFIERS

Solutions for Advancing Communications

PA-25



Efficient Effective, Communications

Mentor Radio has designed a family of products loaded with versatility that increases safety.

Our PA-25 power amp will increase the transmitter power of your existing unit to a full 25 watt carrier.

Utilize this product with your existing radio's transmitter, whether it be a mobile radio, base station or handheld radio to increase the power output without the expense of a new radio

Perfect for field applications where distance or range is crucial.

- **RATED AT 100 WATTS CONTINUOUS OR A FULL 100% DUTY CYCLE.** Suitable for use with any station that broadcasts continuously on transmitters in applications such as, Automatic Surface observation Stations (ASOS) or an Automated Weather Observation Stations (AWOS) OR Automatic Terminal Information Stations (ATIS). If hardware hindered rather than license limited, our PA-25 is the ticket to increase safety in your airspace.
- **CONNECT TO ANY VHF AVIATION OR MARINE BAND MOBILE OR BASE RADIO.** Power required is a +28VDC power supply usually found within the unit you are wanting to increase transmission power, (If you need one, see mentor Radio Model PS-320).
- **BUILT IN SOLID STATE TRANSMIT/RECEIVE SWITCH**
- **OPTIONAL OUTPUTS ALLOW FOR DETECTING BOTH FORWARD AND REVERSE TRANSMIT POWER.** Suitable for interfacing to a closed loop power control system providing programmable power control.
- **SIMPLE INSTALLATION.** Quick disconnect "Mate-N-Lok" plug allows you to connect all the power and control signals through a single receptical. Connect the RF coax input to your radio and your antenna to the output connector.
- **MOBILE APPLICATIONS.** Physically small enough to be mounted in a vehicle.



SPECIFICATIONS

Transmitter

Frequency Range: 118 to 137 MHz, or 154 to 170 MHz
Output Power Maximum: 100W Peak Envelope Power (PEP) or 25 W carrier
Gain: 10dB or 15dB
Modulation: 80% AM with 25W carrier, less than 10% distortion
Output VSWR: 30:1

Input Power

Voltage: +28VDC
Current @ 100W Pout: 7A

Tx/Rx Switch

Switching Time: < 20msec
 PTT Control Voltage: Tx < 10 VDC, Rx > 10VDC

Receive Path Loss: < 0.5dB

Optional: Forward and Reflected Power Monitor

Forward Power: 0 to 5 VDC for Pout from 1W to 100 W
Reverse Power: 0 to 5 VDC for Preflected from 1W to 100W

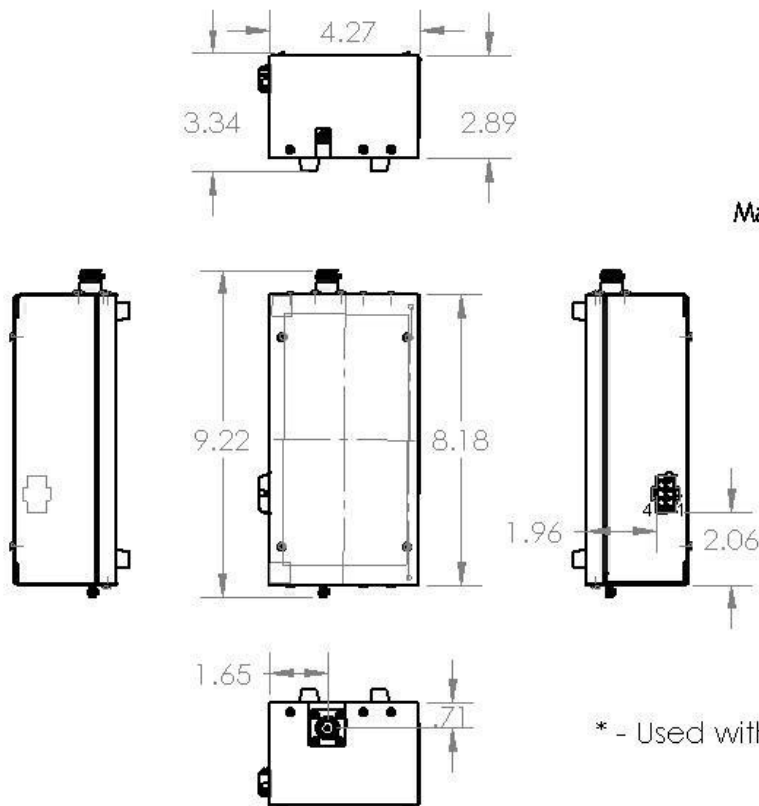
Connectors

RF Input: SMA female
 RF Output: N female
 Power/Control: 4 Position Universal "Mate-N-Lok" (Optional: 6 pin)

Mechanical

Size: 4-1/4" x 8-1/4" x 3"
Weight: 2.2 lbs

Temp Range: -20C to + 50C



Mating Connector Pinout

Pin	Function
1	GND
2	13.8VDC
3	28VDC
4	PTT
5 *	PM-FWD
6 *	PM-REV

* - Used with M2115-B Only

