

PA500 MF Power Amplifier

The PA500 MF is a solid state, broadband power amplifier, designed to meet the new standards of software reprogrammable radios to satisfy the performance required in the use of HF radios in modern, digital communication systems.

The PA500 MF has proven performance used as a standard RF amplification module. The RF Amplifier/Power Supply is a self-contained unit suitable for tabletop or 19" rack installation.

Broadband RF amplification with the complete elimination of tunable elements gives the family's components the frequency agility characteristics required by ALE (Automatic Link Establishment) operation over the HF band.

The main features of the amplifier are:

- Built-in controller
- LCD monitor
- 2 –levels overheat protection
- Short/open output protection
- Continuous operational cycle at full output power
- High reliability in harsh environment



TECHNICAL SPECIFICATIONS

Frequency range:	1.5-30 MHz	VSWR	2:1 – 5:1
Output Power: in SSB mode in CW mode	peak - 500 W average - 500 W	Operation with unmatched load:	Output power is reduced: 240W at VSWR=2, 180W at VSWR=3, 160W at VSWR=4, 80W at VSWR=5, autonomous protection at short or open output
Gain:	38 dB	Turning on time	3 s
Gain flatness in frequency range	±1 dB	Tx/Rx switching time	10 ms
Input power level	18±3 dBm	Rx/Tx switching time	25 ms
Intermodulation	better than -34 dB (ref to any tone)	Switching between any harmonic filters	2 ms
Non-harmonic components:	better than - 70dB	Cooling system:	forced air cooling
Harmonic components:	better than - 60dB is provided with 8-bands switchable filter at frequency bands: 1,5-2,2 MHz 2,2-3,2 MHz 3,2-4,6 MHz 4,6-6,7 MHz 6,7-9,8 MHz 9,8-14,2 MHz 14,2-20,6 MHz 20,6-30 MHz	Over heat protection:	Cooling system automatic control, 2-level protection.
Input/output impedance:	50 Ohm	Primary Power:	90-250 VAC, 47-63Hz
		Power consumption:	Less than 1700 W.
		Duty cycle:	Continuous, with forced air cooling
		Operation temperature range	-10 to +50 °C
		Dimensions:	482(W) ×177(H) ×627(D) mm
		Weight:	27 kg