

## PA500MF

### 500 W HF Power Amplifier

The PA500 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 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:		Operation with unmatched load:	Output power is reduced:
in SSB mode	peak - 500 W		240W at VSWR=2.0
in CW mode	average - 500 W		180W at VSWR=3.0
Gain:	38 dB		160W at VSWR=4.0
Gain flatness in frequency range	±1 dB		80W at VSWR=5.0 autonomous protection at short or open output
Input power level	18±3 dBm	Turning on time	3 s
Intermodulation	better than –34 dB (ref to any tone)	Tx/Rx switching time	10 ms
Non-harmonic components:	better than – 70dB	Rx/Tx switching time	25 ms
Harmonic components:	better than – 60dB is provided with 8-bands switchable filter at frequency bands:	Switching between any harmonic filters	2 ms
	1.5-2.2 MHz	Cooling system:	forced air cooling
	2.2-3.2 MHz	Over heat protection:	Cooling system automatic control, 2-level protection.
	3.2-4.6 MHz		90-250 VAC, 47-63Hz
	4.6-6.7 MHz	Primary Power:	
	6.7-9.8 MHz	Power consumption:	Less than 1700 W.
	9.8-14.2 MHz	Duty cycle:	Continuous, with forced air cooling
	14.2-20.6 MHz	Operation temperature range	-10 to +50 °C
	20.6-30 MHz	Dimensions:	482(W) ×177(H) ×627(D) mm
Input/output impedance:	50 Ω	Weight:	27 kg