

## PA 500C

### 500 W HF Power Amplifier

The PA 500 is a solid state, cost effective, broadband power amplifier

designed to meet the new standards of software defined 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.

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
- LED indicators
- 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: 240W at VSWR=2, 180W at VSWR=3, 160W at VSWR=4, 80W at VSWR=5, autonomous protection at short or open output
in SSB mode	peak - 500 W	Tuning time	3 s
in CW mode	average - 500 W	Tx/Rx switching time	10 ms
Gain:	38 dB	Rx/Tx switching time	25 ms
Gain flatness in frequency range	±1 dB	Switching between any harmonic filters	2 ms
Input power level	18±3 dBm	Cooling system:	forced air cooling
Intermodulation	better than –34 dB (ref to any tone)	Over heat protection:	Cooling system automatic control, 2-level protection.
Non-harmonic components:	better than – 70dB	Primary Power:	90-250 VAC, 47-63Hz
: Harmonic components	better than – 60dB provided with 8-bands switchable filter at frequency bands:	Power consumption:	Less than 1700 W.
	1.5-2.2 MHz	Duty cycle:	Continuous, with forced air cooling
	2.2-3.2 MHz	Operation temperature range	-10 to +50 °C
	3.2-4.6 MHz	Dimensions:	482(W) ×177(H) ×627(D) mm
	4.6-6.7 MHz	Weight:	27 kg
	6.7-9.8 MHz		
	9.8-14.2 MHz		
	14.2-20.6 MHz		
	20.6-30 MHz		
Input/output impedance:	50 Ω		