

PA 1000MF 1 kW HF Power Amplifier

The PA 1000MF 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 PA1000MF 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:	1.6-30 MHz	VSWR	2:1 – 4:1
Output Power: in SSB mode	peak - 1000 W	Operation with unmatched load:	Output power is reduced, autonomous protection at short or open output
in CW mode	average - 1000 W		
Gain:	14 dB	Tx/Rx switching time	15 ms
Gain flatness in frequency range	±1 dB	Rx/Tx switching time	15 ms
Input power level	40 W	Switching between any harmonic filters	15 ms
Intermodulation	better than –32 dB (ref to any tone)	Cooling system:	forced air cooling
Non-harmonic components:	better than – 70dB	Over heat protection:	Cooling system automatic control, 2-level protection.
Harmonic components:	better than – 60dB is provided with 8-bands switchable filter at frequency bands:	Primary Power:	48 VDC
	1.5-2.3 MHz	Current: in SSB mode	Less than 40 A,
	2.3-3.3 MHz	in CW mode	Less than 70 A
	3.3-4.7 MHz	Duty cycle:	Continuous, with forced air cooling
	4.7-6.8 MHz	Operation temperature range	-10 to +50 °C
	6.8-9.7 MHz	Dimensions:	482(W) ×221(H) ×475(D) mm
	9.7-14.0 MHz	Weight:	29 kg
	14.0-20.0 MHz		
	20.0-30 MHz		
Input/output impedance:	50 Ω		