

## PA 1000MFZ 1 kW HF Power Amplifier

The PA 1000MFZ is a solid state, broadband power amplifier designed to meet the new standards of software defined radios (SDR) to meet the highest performance requirements for HF radios in modern digital communication systems.

The PA1000MFZ is universal device providing automatic/manual configuration of its circuitry and gain depending of the input signal level. The RF Amplifier/Power Supply is a stand alone unit suitable for tabletop or 19" rack installation.

PA 1000MFZ is capable to operate with radios complying MIL-STD-188-141A, STANAG 4444, STANAG 5066. The Power amplifier meets MIL-STD-810E.

The main features of the amplifier are:

- Built-in controller
- Built-in Pre-amplifier
- 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 – 4:1
Output Power: in SSB mode in CW mode	peak - 1000 W average - 1000 W	Operation with unmatched load:	Output power is reduced, 650W at VSWR=2.0 450W at VSWR =3.0 330W at VSWR =4.0 260W at VSWR =5.0 autonomous protection at short or open output
Gain:	14 / 42 dB (automatic switching)	Switching on time	3 s
Gain flatness in frequency range	±1 dB	Tx/Rx switching time	10 ms
Input power level	40 W / 18±3 dBm	Rx/Tx switching time	25 ms
Intermodulation	better than –32 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 Ω	Primary Power:	90-250 VAC, 47-63Hz
		Power consumption:	Less than 3350 W
		Duty cycle:	Continuous, with forced air cooling
		Operation temperature range	-10 to +50 °C
		Dimensions:	482(W) ×221(H) ×475(D) mm
		Weight:	29 kg