

150W HF Power Amplifier

PA 150W is designed according to the highest accuracy requirements with the most advanced technology. The amplifier provides the highest level of linearity, power efficiency and reliability of HF radio transceivers in the up-to-day digital communications. PA 150W is intended to amplify RF signal within 1.5...30 MHz frequency range.

It provides reliable communication in most harsh environmental conditions.



Technical specifications

Operating frequency range:	1.5-30 MHz
Output power in CW, SSB PEP modes:	Four levels: 150 W \pm 1 dB 75 W \pm 1 dB 37 W \pm 1 dB 19 W \pm 1 dB
Amplification gain:	36 dB
Nominal power input level:	16 dBm \pm 3 dBm
Intermodulation:	less than -38 dB relative to PEP at 50 Ω load -34 dB relative to PEP with VSWR \geq 2:1
Harmonic level:	less than -50 dB, with 7-band switchable filter in the following frequency bands: 1.5 - 2.3 MHz 2.3 - 3.5 MHz 3.5 - 5.4 MHz 5.4-8.3 MHz 8.3 -12.8 MHz 12.8 - 20.0 MHz 20.0 - 30.0 MHz
Non-harmonic component level:	less than - 70 dB
Input/output impedance:	50 Ω
Operation at load mismatch:	Operation is provided in the load range with VSWR 2:1 – 5:1. At this condition an output power will be reduced to: 97W at VSWR =2, 68W at VSWR=3, 50W at VSWR=4, 60W at VSWR=5, Independent protection at short and open output is provided.
Activation time:	2 sec.
Switching time of transmission/reception:	10 msec.
Switching time of reception/transmission:	25 msec.
Switching time between any harmonic filters:	2 msec.
Interface:	RS232 / RS485
Control system:	It provides a monitoring and indicates the following features: Output power level; reflected power level; VSWR value; operating frequency range; input signal level; thermal conditions control; monitoring of the separate functional node operability of the device.
Cooling system:	Air forced ventilation
Overheating protection:	Automatic cooling system control, two-step overheating protection.
Power supply voltage :	27 \pm 2V DC. Input current is less than 19A at nominal load in CW mode.
Operation cycle:	Continuous using the air forced ventilation
Operating temperature range:	-30°C to +55° C
Dimensions:	159x164x381.5 mm
Weight:	18 kg