



RH6138-1000W

The RH6138 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 RH6138 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.

RH6138 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
Output Power: in SSB mode in CW mode	peak — 1000 W average — 1000 W
Gain:	14 / 42 dB (automatic switching)
Gain flatness in frequency range	±1 dB
Input power level	40 W / 18±3 dBm
Intermodulation	better than -32 dB (ref to any tone)
Non-harmonic components:	better than - 70dB
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
Input/output impedance:	50 Ω
VSWR	2:1 - 4:1
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
Switching on time	3 s
Tx/Rx switching time	10 ms

Rx/Tx switching time	25 ms
Switching between any harmonic filters	2 ms
Cooling system:	forced air cooling
Over heat protection:	Cooling system automatic control, 2-level protection.
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