ACOM 1000

HF + 6 m Linear Amplifier



OUTSTANDING HF POWER PRODUCTS

www.acom-bg.com

MAIN FEATURES

EASY TO OPERATE

The plate-load True Resistance Indicator (TRI) is a powerful tuning aid which, together with the automatically controlled input attenuator, helps the operator to quickly and precisely match antennas (5-10 seconds typically). The AUTO-OPERATE function (when enabled) maintains the amplifier in OPERATE mode for you, thus saving manual operations and time.

NO ANTENNA TUNER NEEDED

No heavy outboard antenna tuners required for antenna SWR up to 3:1 (and higher on some bands). Your amplifier will perform the functions of an antenna tuner, thus enabling you to change antennas faster and use them over a wider frequency range (saving tuning time).

EFFICIENT TUNING

Less QRM and improved Electro Magnetic Compatibility during tuning. Antenna matching can be achieved in less than 10 seconds at a quarter of nominal output power.



BROADBAND INPUT MATCHING

Resulting in a very good load to the transceiver over the entire spectrum from 1.8 MHz up to 54 MHz.

OLED COMMENT DISPLAY

All amplifier status indications are explained via detailed text displayed on the dot matrix display OLED. The upper-line's strip on the OLED always reads peak forward power. LED indicators are provided for OPERATE, attenuation-on, and ON/OFF conditions.

USER-FRIENDLY AND DURABLE

An amplifier that is both user-friendly, and that looks after itself. It is designed to safely withstand up to 300 W reflected power, up to 100 milliseconds duration of drive spikes, drive RF "tails" after a PTT or KEY release, operator's inadvertent tuning errors, etc. It would also not cease to function with a "soft" AC line and would deliver more than half power at only 75% of nominal mains voltage. It would withstand up to 10 milliseconds (down to zero) voltage drops, and up to +15% line voltage spikes, which is important particularly when used at field days, DXpeditions, and other portable events.



LESS NOISE IN THE SHACK

The input bypassing and the vacuum antenna relays are virtually quiet even in QSK CW mode due to their special mounting.

TRANSCEIVER-INDEPENDENT

The amplifier operates without special signals from the transceiver - "Ground on TX" and 60 W RF drive power are sufficient.

SINGLE TUBE OPERATION

Uses a single 4CX800A (GU74B) Svetlana high-performance ceramic-metal tetrode with plate dissipation of 800 W (forced air cooling, grid-driven).

TUBE PROTECTION

Permanent monitoring and protection of plate and grid voltages and currents, as well as of the exhaust air temperature.

OUTPUT RF ARC PROTECTION

An output RF Arc protection is employed. It safeguards the amplifier, antenna, antenna selector, and tuner against severe damage in case of possible breakdown.

CONTINUOUS MONITORING

Continuous measuring and/or selectable monitoring of 12 most important parameters of the amplifier, exciter, and antennas via OLED display.

EASY MAINTENANCE

Signatures of the amplifier internal status are stored in a nonvolatile memory for 7 most recent auto protection trips. This information can be forwarded to your dealer for diagnostics.

SPECIFICATIONS

FREQUENCY COVERAGE
All amateur bands in the 1.8-54 MHz frequency range (extensions and/or changes on request)

POWER OUTPUT
1000 W PEP or continuous carrier, no mode limit

INTERMODULATION DISTORTION
Better than 35 dB below rated output

HUM AND NOISE
Better than 40 dB below rated output

MAINS POWER SUPPLY VOLTAGE
85-132 VAC / 170-264 VAC (100, 110, 120, 200, 210, 220, 230 & 240 V nominal taps, +10% -15% tolerance), 50-60 Hz, Single phase

MAINS POWER CONSUMPTION
2200 VA at rated output



HARMONIC OUTPUT SUPPRESSION
- 1.8-29.7 MHz - better than 50 dB below rated output
- 50-54 MHz - better than 66 dB below rated output

INPUT AND OUTPUT IMPEDANCES
- Nominal value: 50 Ohm unbalanced, UHF (SO-239) type connectors
- Input circuit: broadband, SWR less than 1.3:1, 1.8-54 MHz continuously (no tuning, no switching)
- Bypass path SWR less than 1.1:1, 1.8-54 MHz continuously
- Output (antenna) impedance matching capability: SWR up to 3:1 or higher

RF GAIN
12.5 dB typically, frequency response less than 1 dB (50-60 W drive power for rated output)

SAFETY AND ELECTROMAGNETIC COMPATIBILITY
Complies with CE safety and electromagnetic compatibility requirements, as well as with the US Federal Communications Commission (FCC) regulations

SIZE & WEIGHT
- Operating (excluding connected cables), WxDxH: 422x355x195 mm, 22 kg (16.7x14.0x7.7 inches, 48.5 lbs.)
- Shipping, WxDxH: 590x490x380 mm, 25.5 kg (23.3x19.3x15.0 inches, 56.3 lbs.)

OPERATING ENVIRONMENTS
- Temperature range: 0...+50 °C (32 °F to 122 °F)
- Relative air humidity: up to 95% @ +35 °C (95 °F)
- Height above sea level: up to 3050 m (10000 ft) without output deterioration

Dealer/Partner's address:



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