ACOM 600S

HF + 6 m LINEAR AMPLIFIER

FEATURES

• 5" (108x65mm) high resolution color display, 800x480 pixels and 24-bits colors.
• The final stage uses field effect (MOSFET) transistors type MRFE6VP6300H, which, according to their manufacturer Freescale Semiconductor - are designed to withstand high mismatch (SWR) at the output and are intended for operation in aerospace, industrial, mobile, and radio broadcast applications.
• Compatible with all transceiver models available on the market - does not need any special signals: "ground on transmit" (PTT) and 30W of RF drive power is sufficient.
• Broadband input circuit providing a perfect transceiver load with SWR below 1.2:1 (typically 1.1:1), without retuning throughout the whole frequency range from 1.8 to 54MHz
• The overall operation of ACOM 600S is extremely simplified: the screen menus are intuitive and easy to follow and no special skill is required from the operator when changing frequency bands
• Possibility of automatic control - when connected to a transceiver with a CAT interface, the amplifier monitors constantly, duly follows the operating frequency, and changes the bands accordingly.
• Even if not connected with CAT interface, the amplifier monitors the frequency of the input signal through the built-in frequency counter and automatically switches over the bands.
• Remotely controlled by RS232 interface.
• Takes care of itself during operation due to the continuously working protection circuits in all modes.
• The operator can monitor digitally more than 10 parameters concerning the working regime of the amplifier.
• Easy maintenance – detailed data (55 parameters) about each of the last 28 hard-fault protection trips is stored in the amplifier’s nonvolatile memory.
• Convenient for expeditions and field operation: extremely compact and light construction, extended mains voltage range (85-132VAC and 170-265VAC through changing only the main fuses - no internal switching), limited inrush current and purely sinusoidal consumed mains current, automatic Power Factor Correction (PFC) – all significant parameters in operation from unstable mains, generators etc. features achieved thanks to the built-in switching-mode power supply (SMPS).
• Perfect electromagnetic compatibility (EMC) both with the highly sensitive as well as with the powerful appliances in the radio station (receivers, computers, more amplifiers) exceeding the standard EMC requirements due to the use

SPECIFICATIONS

a) Rated output power: 600W +/-0.5dB, PEP or continuous carrier, without mode limitation.
b) Intermodulation distortions (IMD3): better than 28dB (30dB typically) below the rated PEP output.
c) Harmonic and parasitic emissions output suppression: better than 60dB (65dB typically).
d) Input and output impedances: nominal value: 50 Ohm unbalanced, UHF (SO239) type connectors;
• input circuit: broadband, SWR below 1.2:1 (1.1:1 typically); 1.8 – 54 MHz continuous range without retuning or switching;
• RF by-pass path SWR - below 1.1:1, 1.8-54 MHz;
• admissible SWR at the output load (the antenna): up to 3:1 with proportional power reduction and up to 1.5:1 for full output power;
e) RF power gain: 14dB +/-1dB (typically 25W for 600W output power);
f) Mains power supply voltage: 85-132V with 10A main fuses and 170-265V with 6.3A main fuses, 45-66Hz, single phase;
g) Mains power consumption at full output power: 1500VA or less with a power factor of 0.95 or higher;
h) Mains power consumption in Low Energy (waiting) mode: less than 1VA;
i) Complies with EU safety regulations and electromagnetic compatibility standards, as well as with the US Federal Communications Commission (FCC) rules;
j) Environment working conditions:
• temperature range: -10°C to +40°C (14°F to 104°F);
• relative air humidity: up to 95% @ 35°C (95°F);
k) Dimensions (projections not included) and weight, operating: (W x H x D) 330 x 165 x 380 mm (13 x 6.5 x 15 ln); 12 kg (26.5 Lbs).