

NA 501

500W FM POWER AMPLIFIER

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GENERAL DESCRIPTION

The NA 501 is a highly integrated broadband solid-state Mos-Fet FM amplifier of 500W rated power, fitted in a 4 unit 19" rack, which do not require any specific calibration to operate in the 87.5 - 108 MHz frequency range.

Its compact size, high efficiency, wide mains range acceptance, low maintenance requirements and broadband construction, make this amplifier ideal in medium power repeaters, in unattended posts, in N+1 systems and as a reserve.

Its sturdy, modular mechanical and electrical construction guarantees a high MTBF and an easy maintenance. The modules are easily identifiable and inspectable with few interconnections each with the other, through multi-pole connectors.

The nominal RF output power is obtained over the full FM range with a mere 8W drive and is particularly stable against time, temperature and frequency variations being ALC regulated, with a front panel adjustment. The output power may be varied from a minimum level to the nominal level and the frequency varied over the full FM range, without retouching the drive power or any other adjustment than the ALC control.

The output stage has a reverse intermodulation figure, which is lower than standard bipolar construction, due to the all Mos-Fet design and approaches that of tube equipment.

A simple metering and alarm section completes the amplifier, permitting an easy check of the functioning with few, unambiguous readings. Power readings and control are externally available on a remote I/O port, for an external controller. A suitable one may be supplied on request to permit full remote control of the Unit from the studio or another service centre.

The whole assembly is designed in accordance with the CCIR, FCC and tighter international norms and conforms to the recent, strict ϵ requirements for EMI susceptance and emission.

This equipment complies in particular to ETSI EN300.384 and EN 300.447 Broadcast and EMI/EMC standards, EN60065 and EN60215 safety standards and FCC parts 73 & 74.