

6.1 SYSTEM DESCRIPTION

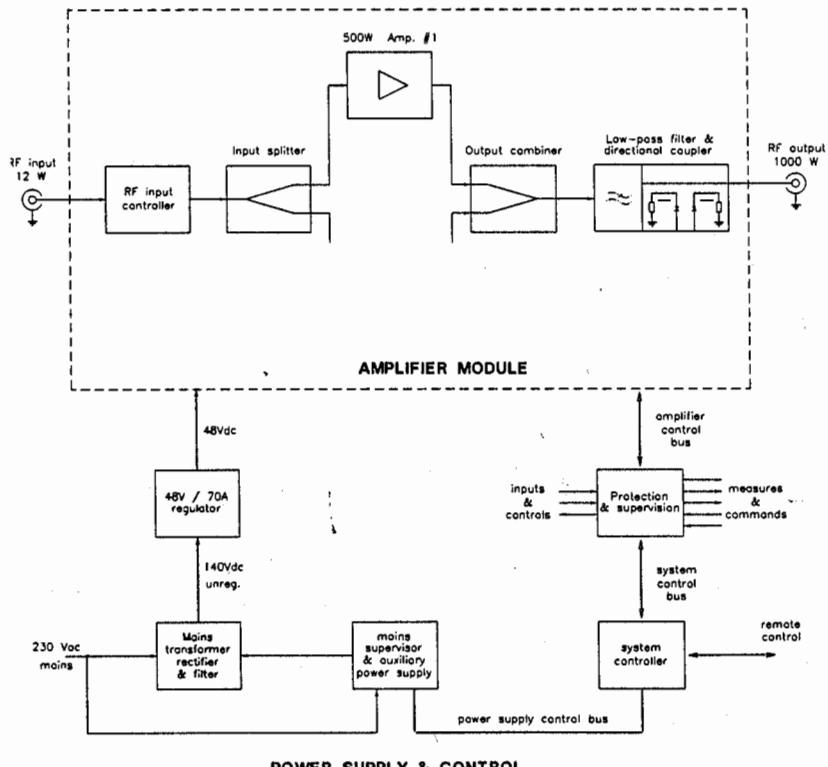
3 basic sections compose the NA 501: the RF amplifier box, the power supply and the control and metering section.

The RF section comprises 1x500W amplifier modules connected through strip-line combiners. All the RF transistors are Mos-Fet type. A low-pass filter with directional coupler completes the section, which is completely screened by a metal box, to comply with EMI requirements. A fully planar design permits an immediate access and inspection to the 2 internal modules.

The power supply comprises a mains transformer, whose output is rectified and filtered and a highly efficient Switch-Mode Power Supply regulator.

The RF control section is built on one small board. It performs RF AGC and protection control; providing metering and an interface to the external I/O port. Both direct and reflected power are displayed and provided as proportional analog signal at the Remote I/O port. Through this port is possible as well to command the RF output power, overcoming the internal front panel regulation.

6.2 INTERNAL DESCRIPTION



NA 501: Block diagram