

The Model 10,000A250A is a self-contained, air-cooled, broadband, completely solid state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull MOSFET circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 10,000A250A, when used with an RF sweep generator, will provide a minimum of 10,000 watts of swept power.

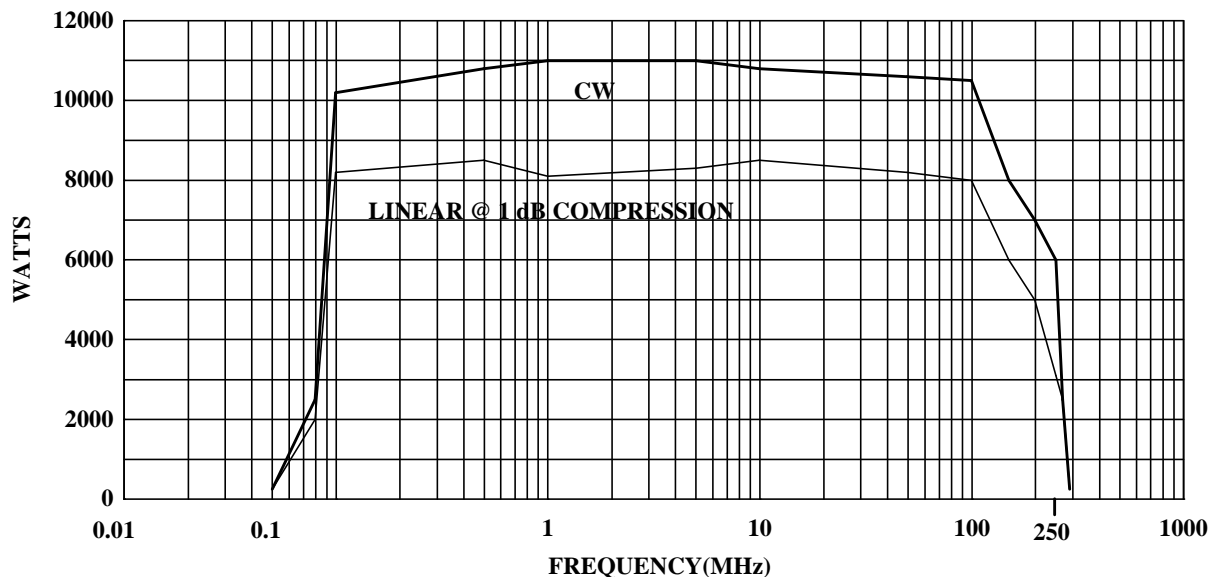
The Model 10,000A250A is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a 3¾-inch diagonal graphic display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer extensive control and status reporting capability. The display provides operational presentation of Forward Power and Reflected Power plus control status and reports of internal amplifier status. Special features include a gain control, internal/external automatic level control (ALC) with front panel control of the ALC threshold, pulse input capability and RF output level protection. Also included is an internal RF detector that provides an output for use in self-testing or operational modes.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format and RS-232 hardware, and fiber optic. The buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

High efficiency universal input, power factor corrected switching power supplies provides DC to all internal sub-assemblies.

Housed in a stylish, contemporary enclosure, the Model 10,000A250A provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, particle accelerators, plasma generation, communications and use as a driver for higher power amplifiers.

**10,000A250A TYPICAL POWER OUTPUT**



## SPECIFICATIONS

### Model 10,000A250A

RATED OUTPUT POWER.....	10,000 watts, 100 kHz – 100 MHz 10,000 – 6,000 watts, 100 MHz – 250 MHz (derating slope of 26.66 watts / MHz)
INPUT FOR RATED OUTPUT.....	1.0 milliwatt maximum
POWER OUTPUT @ 1 db COMPRESSION.....	7,000 watts, 100 kHz - 100 MHz 7,000 - 3,000 watts, 100 MHz – 250 MHz (derating slope of 26.66 watts / MHz)
FREQUENCY RESPONSE.....	100 kHz - 250 MHz instantaneously
GAIN (at maximum setting).....	70 dB minimum
FLATNESS .....	±1.5 dB maximum ±0.8 dB with internal leveling
GAIN ADJUSTMENT (continuous range).....	20 dB minimum
INPUT IMPEDANCE.....	50 ohms, VSWR 1.5:1 maximum
OUTPUT IMPEDANCE.....	50 ohms, VSWR 2.5:1 maximum
MISMATCH TOLERANCE.....	100% rated power without foldback up to 6.0:1 mismatch above which may limit to 5,000 watts reflected power, from 100 kHz to 100 MHz. Limited to 2,000 watts reflected power from 100 MHz to 250 MHz
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM or Pulse modulation appearing on the input signal.
HARMONIC DISTORTION.....	Minus 20 dBc maximum at 6000 watts
THIRD ORDER INTERCEPT POINT.....	77 dBm typical
RF POWER DISPLAY.....	0 - 15,000 watts full scale
<b>PULSE MODE GATING CHARACTERISTICS</b>	
Signal (into 50 ohms).....	+2.0 to 6.0 VDC
Rise Time.....	0.5 microseconds maximum
Fall Time.....	0.5 microseconds
RF RISE/FALL TIME.....	10 nanoseconds maximum
PRIMARY POWER.....	180-267 VAC Delta (4 wire) 360-435 VAC, Delta (4 wire), Wye compatible (5 wire) 432-528 VAC Delta (4 wire), Wye compatible (5 wire) 47-63 Hz, 3 phase (User must specify) Note that in Wye configurations neutral may be used only for low-power circuits 40,000 watts maximum at .95 P.F. typical
<b>CONNECTORS</b>	
RF Input.....	Type N female on rear panel
RF Output.....	Type EIA 1 5/8 male on rear panel
External Leveling Inputs.....	Type BNC female on front panel
Pulse Modulation Inputs.....	Type BNC female on front panel
Detected RF Output.....	Type BNC female on front panel
Remote Control.....	24 pin female GPIB/IEEE-488 connector on rear panel
Safety Interlock.....	15 pin female Type D on rear panel
Forward Power Sample Port (-70 dBc).....	Type BNC female on rear panel
Reverse Power Sample Port (-70 dBc).....	Type BNC female on rear panel
IEEE-488 (GPIB) and RS-232 INTERFACES.....	Allow control of all amplifier functions and monitoring of all status indications via standard GPIB / IEEE-488 commands or RS-232 commands
COOLING .....	Forced air (self contained fans)
WEIGHT (maximum).....	816 kg (1800 lb)
SIZE (W x H x D).....	142.3 x 182.9 x 106.7 cm (56 x 72 x 35 in)