



**Model 5000A225, M1**  
**5000 Watts CW**  
**10kHz–225MHz**

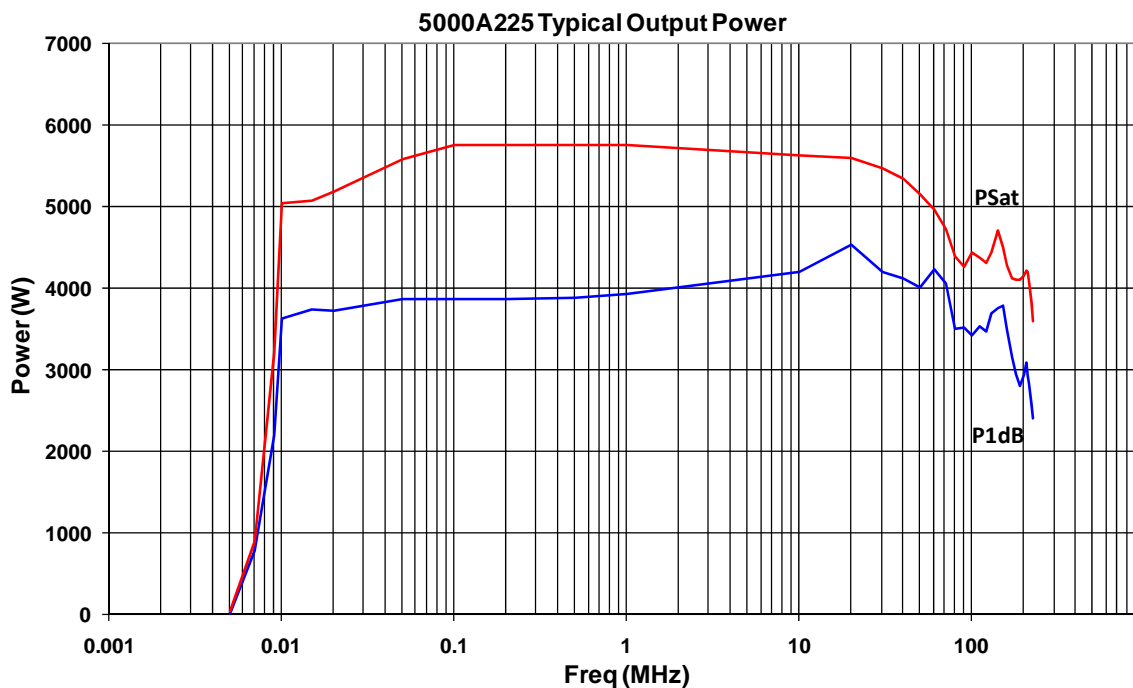
The Model 5000A225 is a self-contained, air-cooled, broadband, completely solid state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull MOSFET circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability.

The Model 5000A225 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a 3<sup>3</sup>/<sub>4</sub>-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. The bus 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 5000A225 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.



**SPECIFICATIONS, MODEL 5000A225**

RATED OUTPUT POWER .....	5000 watts, 10 kHz–50 MHz 5000–4000 watts, 50 MHz–200 MHz (derating slope from 50 MHz–200MHz) 6.66 W/MHz 3500 watts, 200–225 MHz
INPUT FOR RATED OUTPUT .....	1.0 milliwatt maximum
POWER OUTPUT @ 1 dB COMPRESSION .....	3400 watts, 10 kHz–100 MHz 3400–2500 watts, 100 MHz–200 MHz (derating slope of 9.0 watts/MHz) 2000 watts, 200–225 MHz
FREQUENCY RESPONSE .....	10 kHz–225 MHz instantaneously
GAIN (at maximum setting) .....	67 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, nominal
MISMATCH TOLERANCE .....	100% rated power without foldback up to 6.0:1 mismatch above which may limit to 2500 watts reflected power, from 10 kHz to 50 MHz. Limited to 2000 watts reflected power from 50 MHz to 225 MHz.
MODULATION CAPABILITY .....	Faithfully reproduces AM, FM or Pulse modulation appearing on input signal.
HARMONIC DISTORTION .....	Minus 20 dBc maximum at 3000 watts power output.
THIRD ORDER INTERCEPT POINT .....	74 dBm typical
RF POWER DISPLAY .....	0 - 7500 watts full scale
RF RISE/FALL TIME .....	10 nanoseconds maximum
PRIMARY POWER (User must specify) .....	187-264 VAC Delta (4 wire), Wye compatible 365-528 VAC, Wye (5 wire) 47-63 Hz, 3-phase 20,000 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
Forward Power Sample Port .....	Type BNC female on front panel
Reverse Power Sample Port .....	Type BNC female on front panel
Remote Control .....	24 pin female GPIB/IEEE-488 and 9-pin RS-232 connectors on rear panel
Remote Control (fiber optic) .....	ST connector. Tx and Rx RS-232
Safety Interlock .....	15 pin female Type D on rear panel
IEEE-488 (GPIB) INTERFACE .....	Allows control of all amplifier functions and monitoring of all status indications via standard GPIB/IEEE-488 commands
COOLING .....	Forced air (self contained fans with internal self-contained liquid cooling)

**MODEL CONFIGURATIONS**

<b>MODEL</b>	<b>DESCRIPTION</b>	<b>SIZE</b>
5000A225	Standard	56 x 152.4 x 97.5cm, 22.1 x 60 x 38.4 in
5000A225M1	See Separate Specification Sheet	