

## rf/microwave instrumentation

Model 2500A225, M1 through M4 2500 Watts CW 10kHz-225MHz

The Model 2500A225 is a self-contained, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. The amplifier is air cooled using internal self-contained liquid cooling for high performance and reliability. Push-pull LDMOS circuitry is utilized in all high power stages in the interest of low distortion and improved stability.

The Model 2500A225 is equipped with a Digital Control Panel (DCP), providing local and remote control of the amplifier. The DCP uses a 3 ¾ inch diagonal graphic display, menu assigned softkeys, a single rotary knob, and four dedicated switches to offer extensive control and status reporting. The display provides operational presentation of Forward Power and Reflected Power plus control status and reports of internal amplifier status.

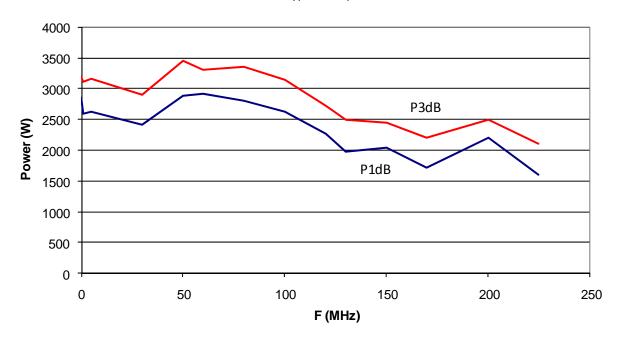
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hard wire, fiber optic and USB. The bus interface connectors are located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the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

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

Housed in a stylish, contemporary enclosure, the Model 2500A225 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.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

## 2500A225 Typical Output Power



## SPECIFICATIONS, MODEL 2500A225

RATED OUTPUT POWER	2500W, 10 kHz–100 MHz 2500–1900W, 100 MHz–225 MHz (derating slope of 4.8W/MHz)	
INPUT FOR RATED OUTPUT	1.0 mW Max	
POWER OUTPUT FOR 1dB COMPRESSION	2000W, 10 kHz-100 MHz 2000–1200W. 100 MHz-225 MHz (derating slope of 6.4W/MHz)	
FREQUENCY RESPONSE	10 Khz-225 MHz instantaneously	
GAIN (at max. setting)	64 dB min.	
FLATNESS	± 3.0 dB max ± 1.0 dB with int. leveling	
GAIN ADJUSTMENT (continuous range)	20 dB minimum	
INPUT IMPEDANCE	50 ohms, VSWR 1.5:1 max	
OUTPUT IMPEDANCE	50 ohms nominal	
MISMATCH TOLERANCE	100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 1250w reflected power	
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, or Pulse Modulation appearing on the input signal.	
HARMONIC DISTORTION	Minus 20 dBc maximum at 1800W	
RF POWER DISPLAY	0–3000W full scale	
RISE TIME/FALL TIME	10 nanoseconds maximum	
PRIMARY POWER (User must specify)		
PRIMARY POWER (User must specify)  CONNECTORS	187-264 VAC Delta (4-wire) 365-528 VAC, Wye (5-wire) 47-63Hz, 3-phase 10,000W maximum	
PRIMARY POWER (User must specify)  CONNECTORS RF Input RF Output Forward Sample Reverse Sample Remote Control Remote Control (fiber optic)	187-264 VAC Delta (4-wire) 365-528 VAC, Wye (5-wire) 47-63Hz, 3-phase 10,000W maximum  See Model Configurations See Model Configurations BNC Female on front panel BNC Female on front panel 24-pin Female GPIB/IEEE-488, 9-pin RS-232 and USB on rear panel ST Connector, Tx and Rx RS-232	
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## MODEL CONFIGURATIONS

Model	RF Input	RF Output
2500A225	N Female, rear panel	7-16 DIN Female, rear panel
2500A225M1	N Female, front panel	7-16 DIN Female, front panel
2500A225M2	N Female, front panel	7-16 DIN Female, rear panel
Same as M1, cabinet removed for placement in user-supplied cabinet.		
2500A225M3	Contact factory for mounting requirements.	
2500A225M4	See separate specification sheet.	