Model 2500A225, M1, M2
2500 Watts CW
10kHz–225MHz

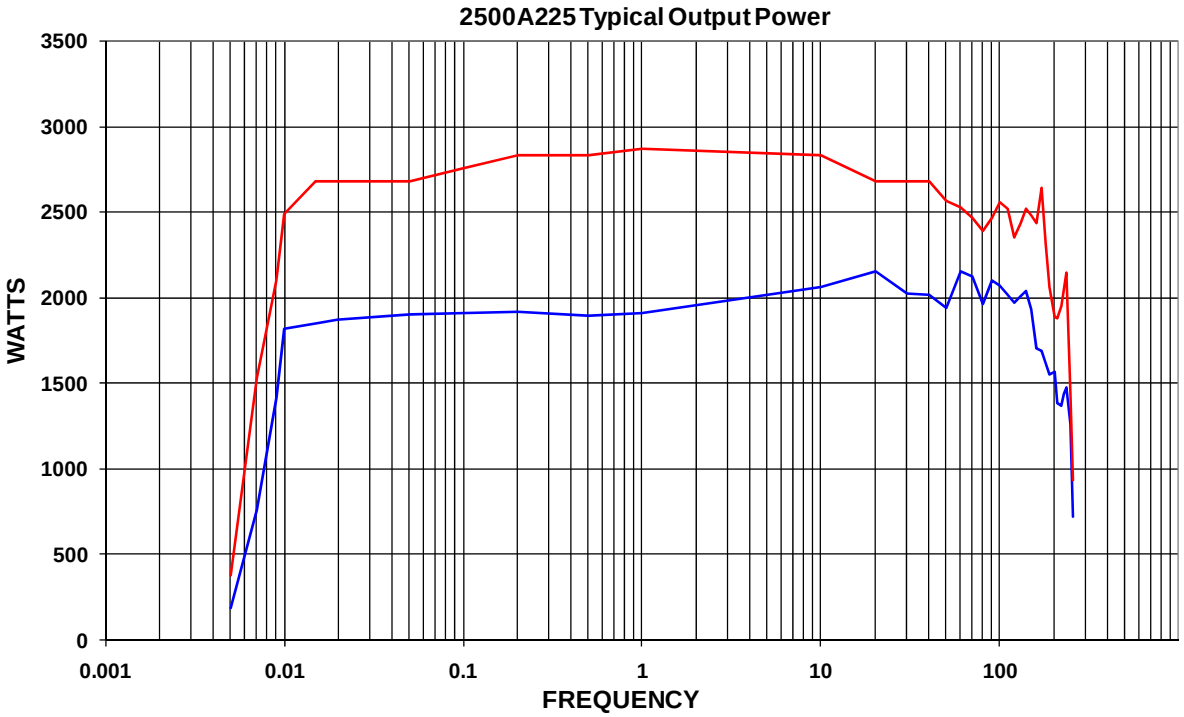
The Model 2500A225 is a self-contained, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. The amplifier is air cooled using internal self-contained liquid cooling for high performance and reliability. Push-pull LDMOS circuitry 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 and fiber optic, and USB and Ethernet. The buss 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.



SPECIFICATIONS, MODEL 2500A225

RATED OUTPUT POWER ..... 2500W, 10 kHz–50 MHz
2500–1900W, 50 MHz–225 MHz (derating slope of 3.43W/MHz)

INPUT FOR RATED OUTPUT ..... 1.0 mW Max

POWER OUTPUT FOR 1dB COMPRESSION ..... 1800W, 10 kHz-50 MHz
1800–1200W. 50 MHz-225 MHz (derating slope of 3.43W/MHz)

FREQUENCY RESPONSE ..... 10 Khz-225 MHz instantaneously

GAIN (at max. setting) ..... 64 dB min.

FLATNESS ..... ± 3.5 dB max
± 0.8 dB with int. leveling

GAIN ADJUSTMENT (continuous range) ..... 16 dB minimum

INPUT IMPEDANCE ..... 50 ohms, VSWR 2.0:1 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 1600W

RF POWER DISPLAY ..... 0–3000W full scale

PULSE MODE GATING CHARACTERISTICS
- Signal (into 50 ohms) ..... +2.0 to 6.0 VDC
- Rise Time ..... 0.5 microseconds maximum
- Fall time ..... 0.5 microseconds maximum

PRIMARY POWER ..... 187-264 vac 3-Phase, 8000W max.

CONNECTORS
- RF Input ..... See Model Configurations
- RF Output ..... See Model Configurations
- Forward Sample ..... BNC Female on front panel
- Reverse Sample ..... BNC Female on front panel
- Remote Control ..... 24-pin Female GPIB/IEEE-488 and 9-pin RS232 on rear panel, USB and Ethernet
- Remote Control (fiber optic) ..... ST Connector
- Safety interlock ..... 15 pin female Type D on rear panel

COOLING ..... Forced air, internal self-contained liquid

WEIGHT (max.) ..... 159 kg (350 lb)

SIZE (WxHxD) ..... 56.1 X 109.2 X 88.9 cm (22.1 X 43.0 X 35.0 in)

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	See Details Below	

Unique Features

2500A225M2	Primary Power …. 370-520, 47-63 Hz, Delta (4 wire)