



**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.

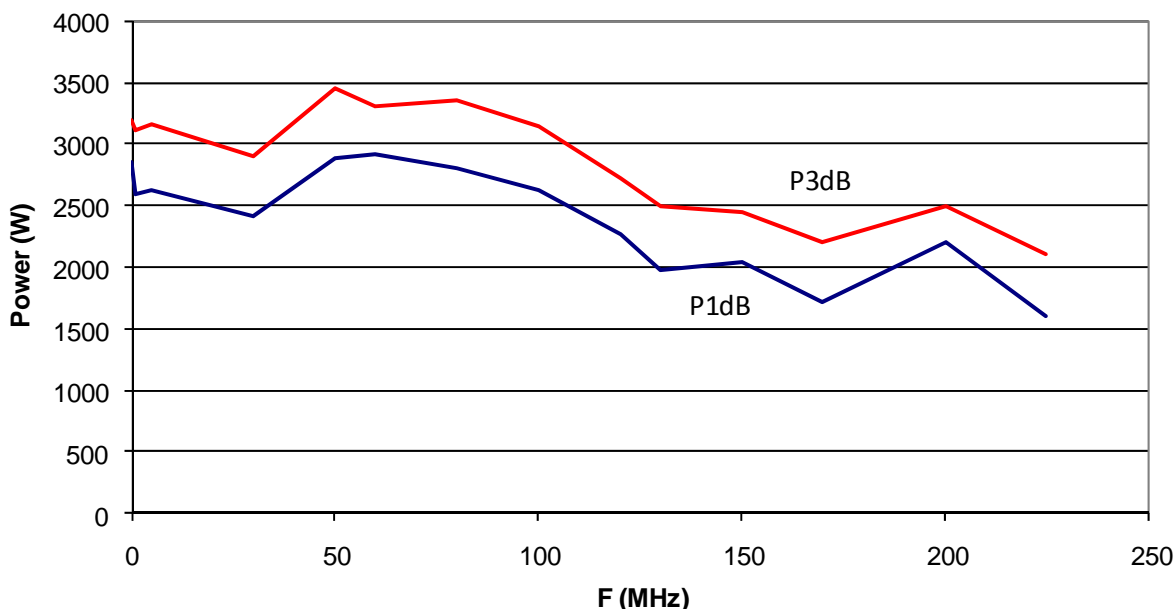
The Model 2500A225 is equipped with a Digital Control Panel (DCP), providing local and remote control of the amplifier. The DCP uses a 3 3/4 inch diagonal graphic display, menu assigned softkeys, a single rotary knob, and four dedicated switches to offer extensive control and status reporting. The display 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.

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..... | ± 3.5 dB max ± 0.8 dB with int. leveling |
| GAIN ADJUSTMENT (continuous range)..... | 20 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 1800W |
| 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 (User must specify)..... | 187-264 VAC Delta (4-wire) 365-528 VAC, Wye (5-wire) 47-63Hz, 3-phase 10,000W maximum |
| 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 (W x H x D)..... | 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 | N Female, front panel | 7-16 DIN Female, rear panel |
| 2500A225M3 | Same as M1, cabinet removed for placement in user-supplied cabinet. Contact factory for mounting requirements. | |
| 2500A225M4 | See separate specification sheet. | |