



rf/microwave instrumentation

Model 1000A225, M1 1000 Watts CW 10kHz–225MHz

The Model 1000A225 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.

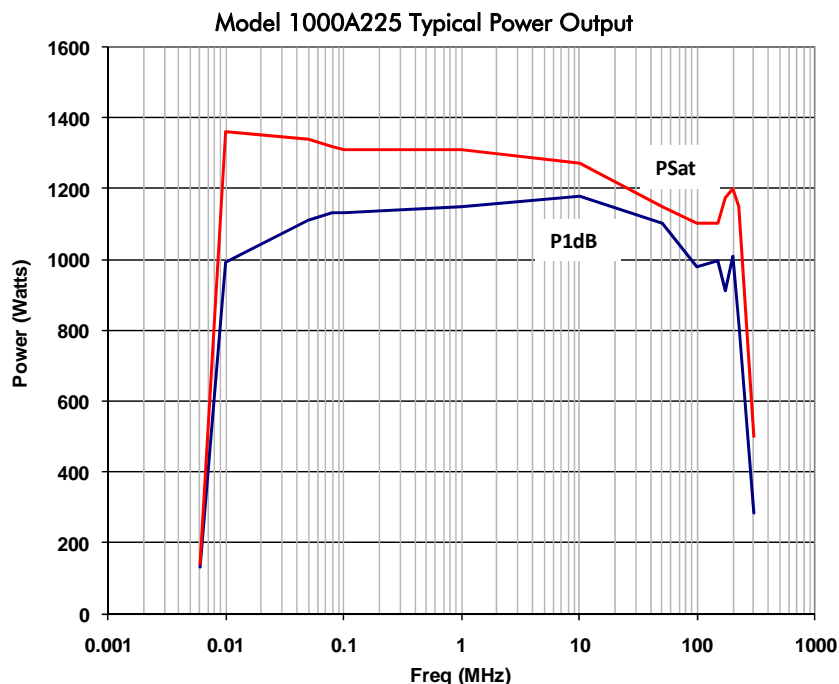
The Model 1000A225 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a 3-3/4 inch diagonal graphic display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer 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 automatic level control (ALC) with front panel control of the ALC threshold and RF output level protection. RF Sample Ports are included to monitor forward and reverse power.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, and RS-232 hard wire and 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 1000A225 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.



SPECIFICATIONS, MODEL 1000A225

RATED OUTPUT POWER	1000 watts
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
POWER OUTPUT @ 1 dB COMPRESSION	900 watts nominal 700 watts minimum
FREQUENCY RESPONSE	10 kHz–225 MHz instantaneously
GAIN (at maximum setting)	60 dB minimum
FLATNESS.....	± 3.0 dB maximum ± 1.0 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 500 watts reflected power.
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM or Pulse modulation appearing on the input signal.
HARMONIC DISTORTION.....	Minus 20 dBc maximum at 750 watts
THIRD ORDER INTERCEPT POINT	68 dBm typical
RF POWER DISPLAY	0–2000 watts full scale
RF RISE/FALL TIME	10 nanoseconds maximum
PRIMARY POWER	187–264 VAC 47–63 Hz, single phase 5,000 watts maximum at .95 P.F. typical
CONNECTORS	
RF Input	See Model Configurations
RF Output	See Model Configurations
Forward RF Sample	Type BNC female on front panel
Reverse RF Sample	Type BNC female on front panel
Remote Control	24 pin female GPIB/IEEE-488, 9-pin RS-232 and USB 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 & RS-232	Allows control of all amplifier functions and monitoring of all status indications.
COOLING.....	Forced air (self contained fans), internal self-contained liquid
WEIGHT (maximum)	127 kg (280 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 Number	RF Input	RF Output
1000A225	N female, rear panel	7-16 DIN female rear panel
1000A225M1	N female, front panel	7-16 DIN female front panel