



1000A225

- M1, M3–M5
- 1000 Watts CW
- 10kHz–225MHz



Features

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 and a single rotary knob 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.

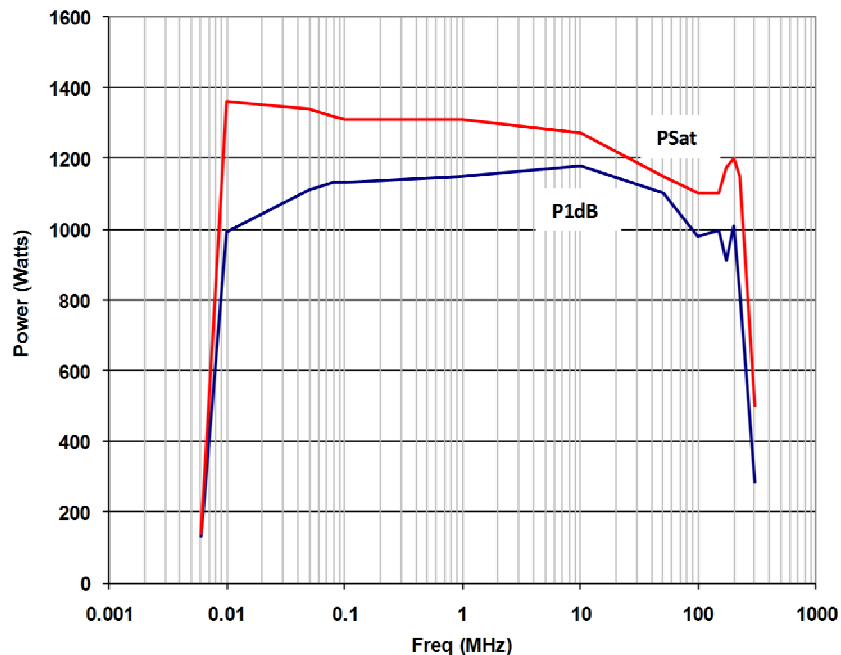
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, and RS-232 hard wire and fiber optic and USB. The bus interface connectors are located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel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

Typical Output Power



AR RF/Microwave
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Specifications

RATED OUTPUT POWER: 1000 watts
INPUT FOR RATED OUTPUT: 1.0 mW Max
POWER OUTPUT FOR 1dB COMPRESSION: 900 watts nominal; 700 watts minimum
FREQUENCY RESPONSE: 10 KHz-225 MHz instantaneously
GAIN (at max. setting): 60 dB min.
FLATNESS: ± 2.5 dB max; ± 1.0 dB with internal 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 500 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
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
RISE TIME/FALL TIME: 10 nanoseconds maximum

PRIMARY POWER: 187-264 VAC, 47-63Hz, single-phase, 5000 watts maximum at .95 P.F. typical
CONNECTORS
 RF Input See Model Configurations
 RF Output See Model Configurations
 Forward RF Sample BNC Female on front panel
 Reverse RF Sample BNC Female on front panel
 Remote Control 24-pin Female GPIB/IEEE-488, 9-pin RS-232 and USB 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) & RS-232 INTERFACE Allows control of all amplifier functions and monitoring of all status indications.
COOLING: Forced air, internal self-contained liquid
WEIGHT (max.): 127 kg (280 lb)
SIZE (W x H x D): 56.1 x 109.2 x 88.9 cm (22.1 x 43 x 35 in)
EXPORT CLASSIFICATION: EAR99

MODEL CONFIGURATIONS

Model	RF Input	RF Output
1000A225	N Female, rear	7-16 DIN Female, rear
1000A225M1	N Female, front	7-16 DIN Female, front
1000A225M3	See separate specification sheet.	
1000A225M4	See separate specification sheet.	
1000A225M5	N Female, front	7-16 DIN Female, rear