MODEL 2000W1000A, M1, M2
2000 WATTS CW
80-1000 MHz

The Model 2000W1000A is a self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 2000W1000A, when used with a sweep generator, will nominally provide over 2000 watts of RF power.

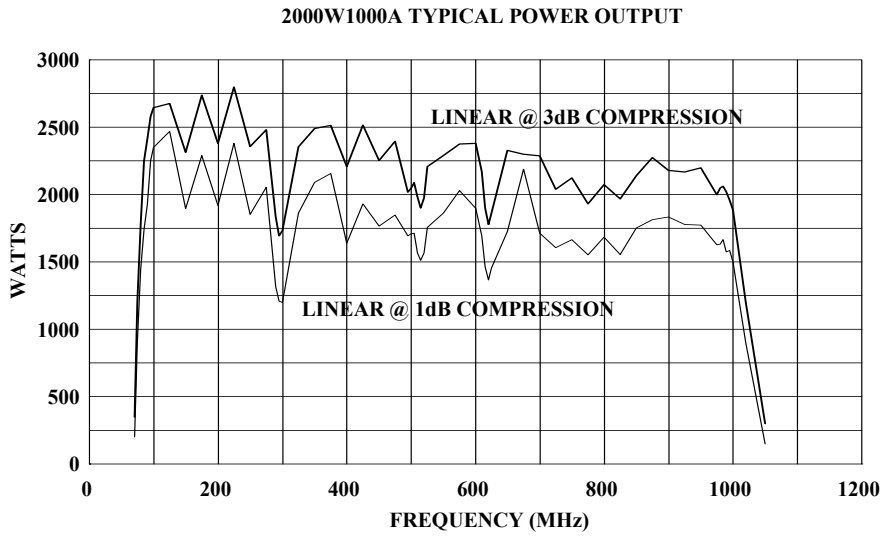
The Model 2000W1000A is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a graphic display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer extensive control 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/external automatic level control (ALC) with front panel control of the ALC threshold, pulse input capability and RF output level protection. Also included is an internal RF detector which provides an output for use in self-testing or operational modes.

All amplifier control functions and status indications are available remotely in GPIB / IEEE-488.2 format, and RS-232 fiber optic. The bus interface connector is 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.

Housed in stylish, contemporary equipment racks, the Model 2000W1000A provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and as a driver for frequency multipliers and higher power amplifiers.

The 2000W1000A consists of two 1000 watt amplifiers which can be operated as independent individual amplifiers and a controller/driver equipment rack.

By simply adding one 1000 watt amplifier and the appropriate combiner along with minor tuning, the 2000W1000A is upgraded to a 3000 watt amplifier with expandability to 4000 watts.



SPECIFICATIONS
Model 2000W1000A

RATED OUTPUT POWER ..... 1900 watts minimum

INPUT FOR RATED OUTPUT ..... 1.0 milliwatts maximum

POWER OUTPUT @ 3dB compression
- Nominal ..... 2100 watts
- Minimum ..... 1650 watts

POWER OUTPUT @ 1dB
- Nominal ..... 1750 watts
- Minimum ..... 1200 watts

FLATNESS ..... ±2.5 dB maximum
±0.8 dB with internal leveling

FREQUENCY RESPONSE ..... 80-1000 MHz instantaneously

GAIN (at maximum setting) ..... 63 dB minimum

GAIN ADJUSTMENT (continuous range) ..... 18 dB minimum

INPUT IMPEDANCE ..... 50 ohms, VSWR 2.0:1 maximum

OUTPUT IMPEDANCE ..... 50 ohms, VSWR 2.0:1 typical maximum

MISMATCH TOLERANCE * ..... 100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 950 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 1500 watts

THIRD ORDER INTERCEPT POINT ..... 70 dBm typical

RF POWER DISPLAY ..... 0-2500 watts

PRIMARY POWER (specify voltage) ..... 200-250 VAC, Delta Connected (4 wire)
360-435 VAC, Wye Connected (5 wire)
50/60 Hz, 3 phase
25 kVA Maximum

CONNECTORS
- RF input ..... See Model Configurations
- RF output ..... Type 1 5/8 EIA on rear
- External leveling inputs ..... Type BNC female on front panel
- Pulse modulation input ..... Type BNC female on front panel
- Detected RF output ..... Type BNC female on front panel
- Safety interlock ..... 15 pin female subminiature D on rear panel
- Remote computer interface ..... 24 Pin female IEEE-488.2 (GPIB) connector on rear panel
- Remote computer interface (fiber optic) ..... ST Conn Tx and Rx RS-232

COOLING ..... Forced air (self contained fans) Enters front and bottom

WEIGHT (approximate) ..... 839 kg (1850 lb)

SIZE (WxHxD) (3 cabinets) ..... (See outline drawing 1013326)
201 x 158 x 160 cm (79 x 62 x 63 in)

See Application Note #27

MODEL CONFIGURATIONS

Model	RF Input Connectors
2000W1000A	Type N female on front panel
2000W1000AM1	Type N female on rear panel
2000W1000AM2	See Separate Specification Sheet