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MODEL 4000W1000  
4000 WATTS CW  
80-1000 MHz

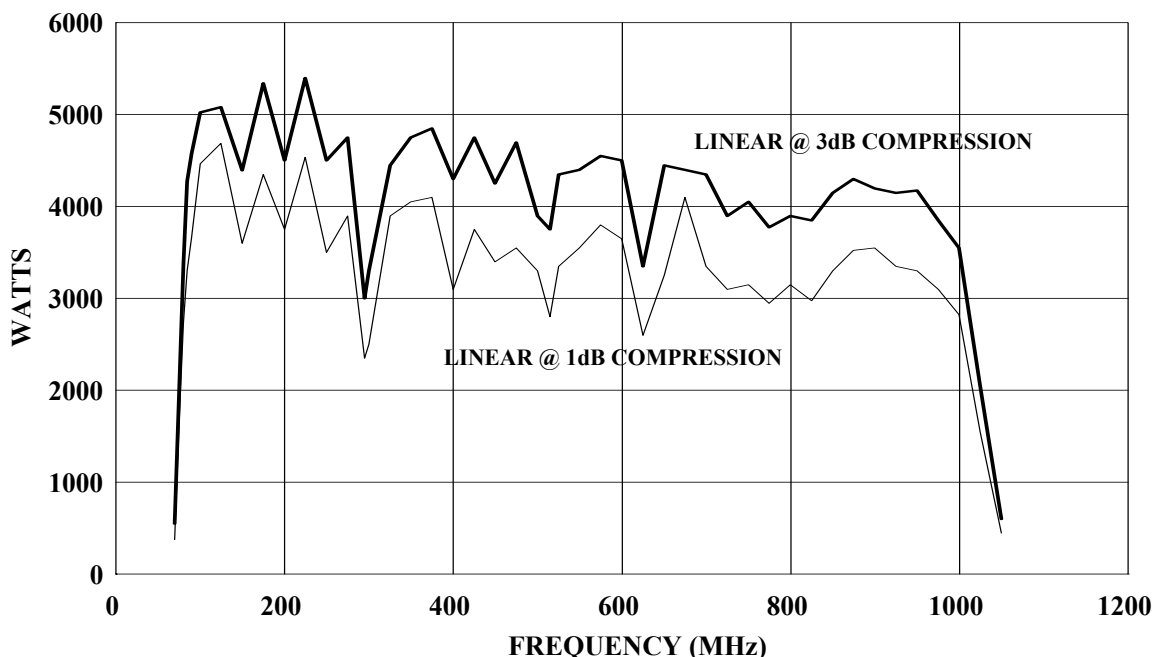
The Model 4000W1000 is a self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 4000W1000, when used with a sweep generator, will nominally provide over 4000 watts of RF power.

The Model 4000W1000 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a 4¾ 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/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 format. 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 4000W1000 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.

#### 4000W1000 TYPICAL POWER OUTPUT



**SPECIFICATIONS**  
**Model 4000W1000**

<i>RATED OUTPUT POWER</i> .....	<i>3600 watts minimum</i>
<i>INPUT FOR RATED OUTPUT</i> .....	<i>1.0 milliwatts maximum</i>
<i>POWER OUTPUT @ 3dB compression</i>	
<i>Nominal</i> .....	<i>4400 watts</i>
<i>Minimum</i> .....	<i>2800 watts</i>
<i>POWER OUTPUT @ 1dB</i>	
<i>Nominal</i> .....	<i>3400 watts</i>
<i>Minimum</i> .....	<i>2200 watts</i>
<i>FLATNESS</i> .....	<i>±2.5 dB maximum</i> <i>±0.8 dB with internal leveling</i>
<i>FREQUENCY RESPONSE</i> .....	<i>80-1000 MHz instantaneously</i>
<i>GAIN (at maximum setting)</i> .....	<i>66 dB minimum</i>
<i>GAIN ADJUSTMENT (continuous range)</i> .....	<i>18 dB minimum</i>
<i>INPUT IMPEDANCE</i> .....	<i>50 ohms, VSWR 2.0:1 maximum</i>
<i>OUTPUT IMPEDANCE</i> .....	<i>50 ohms, VSWR 2.0:1 typical maximum</i>
<i>MISMATCH TOLERANCE *</i> .....	<i>50% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.</i>
<i>MODULATION CAPABILITY</i> .....	<i>Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal</i>
<i>HARMONIC DISTORTION</i> .....	<i>Minus 20 dBc maximum at 2800 watts</i>
<i>THIRD ORDER INTERCEPT POINT</i> .....	<i>73 dBm typical</i>
<i>RF POWER DISPLAY</i> .....	<i>0-2500 watts</i>
<i>PRIMARY POWER (specify voltage)</i> .....	<i>200-250 VAC, Delta Connected (4 wire)</i> <i>360-435 VAC, Wye Connected (5 wire)</i> <i>50/60 Hz, 3 phase</i> <i>48 kVA Maximum</i>
<i>CONNECTORS</i>	
<i>RF input</i> .....	<i>Type N female on rear panel</i>
<i>RF output</i> .....	<i>Type 1 5/8 EIA on top panel</i>
<i>External leveling inputs</i> .....	<i>Type BNC female on front panel</i>
<i>Pulse modulation input</i> .....	<i>Type BNC female on front panel</i>
<i>Detected RF output</i> .....	<i>Type BNC female on front panel</i>
<i>Safety interlock</i> .....	<i>15 pin female subminiature D on rear panel</i>
<i>Remote computer interface</i> .....	<i>IEEE-488 (GPIB) connector on rear panel</i>
<i>COOLING</i> .....	<i>Forced air (self contained fans)</i>
<i>WEIGHT (approximate)</i> .....	<i>1542 kg (3400 lb)</i>
<i>SIZE (WxHxD) (5 cabinets)</i> .....	<i>(See outline drawing #1013732)</i> <i>340 x 158 x 163 cm</i> <i>134 x 62 x 64 in</i>

- See Application Note #27