



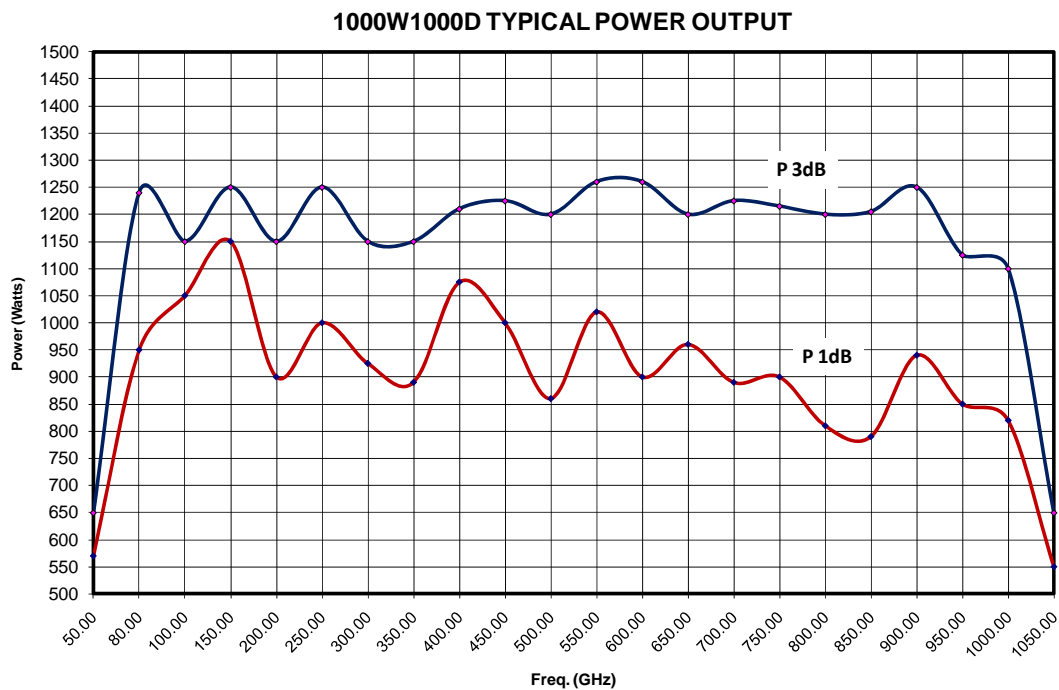
**Model 1000W1000D, M1, M2**  
**1000 Watts CW**  
**80MHz–1000MHz**

The Model 1000W1000D 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 1000W1000D, when used with an RF sweep generator, will provide a minimum of 1000 watts of swept power.

The Model 1000W1000D is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a digital 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 that 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 and RS-232 hardware, and fiber optic. The buss 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.

The 1000W1000D is housed in a single equipment rack and is designed to provide complete stand-alone performance for RF testing. It is also configured to be used as a sub-amplifier in a 2000-watt, 3000-watt or 4000-watt higher power amplifier. It can be added to in an incremental fashion to become a part of these higher power units yet still be used as a stand-alone 1000 watt amplifier.



Export Commodity Classification Number (ECCN), EAR99 items, do not require export control.

## SPECIFICATIONS, 1000W1000D

RATED OUTPUT POWER .....	1000 watts minimum
INPUT FOR RATED OUTPUT .....	1.0 milliwatt maximum
POWER OUTPUT @ 3 dB compression	
Nominal .....	1200 watts
Minimum .....	950 watts
POWER OUTPUT @ 1 dB compression	
Nominal .....	950 watts
Minimum .....	700 watts
FLATNESS .....	± 2.0 dB ± 0.8 dB with internal leveling
FREQUENCY RESPONSE .....	80 - 1000 MHz instantaneously
GAIN (at maximum setting) .....	60 dB minimum
GAIN ADJUSTMENT (continuous range) .....	18 dB minimum
INPUT IMPEDANCE .....	50 ohms, VSWR 2.0:1 maximum
OUTPUT IMPEDANCE .....	50 ohms nominal
MISMATCH TOLERANCE* .....	100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 600 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. *See Application Note #27
MODULATION CAPABILITY .....	Faithfully reproduces AM, FM, or Pulse modulation appearing on input signal.
HARMONIC DISTORTION .....	Minus 20 dBc maximum at 800 watts
THIRD ORDER INTERCEPT POINT .....	66 dBm typical
RF POWER METER .....	0 - 1200 watts full scale
PRIMARY POWER (specify voltage) .....	200 - 240 VAC, Delta Connected (4 wire) 360-435 VAC, Wye Connected (5 wire) 50/60 Hz, 3 phase 12kVA Maximum
CONNECTORS	
RF Input .....	See Model Configurations
RF Output .....	See Model Configurations
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
Remote Computer Interface .....	24 Pin female IEEE-488 (GPIB) and RS-232 connector on rear panel
Remote Computer Interface (fiber optic) .....	ST Conn Tx and Rx RS-232
Safety Interlock .....	15 pin Subminiature D on rear panel
Operate Interface .....	27 pin Subminiature D on rear panel
COOLING .....	Forced air (self contained fans), enters front and bottom
WEIGHT (approximate) .....	340 kg (750 lb)
SIZE (W x H x D) .....	68.8 x 152.5 x 82.5 cm (27.1 x 60.0 x 32.5 in)

### MODEL CONFIGURATIONS

Model	RF input Connector	RF Output Connectors	Comments
1000W1000D	Type N female rear panel	Type 7/16 female on rear panel	
1000W1000DM1	Type N female front panel	Type 7/16 female on front panel	
1000W1000DM2	Type N female rear panel	Type 7/16 female on rear panel	Forward and reverse sample ports, Type N female on front panel (-63 dBc)