



**Model 150W1000,
M1 through M7
150 Watts CW
80MHz–1000MHz**

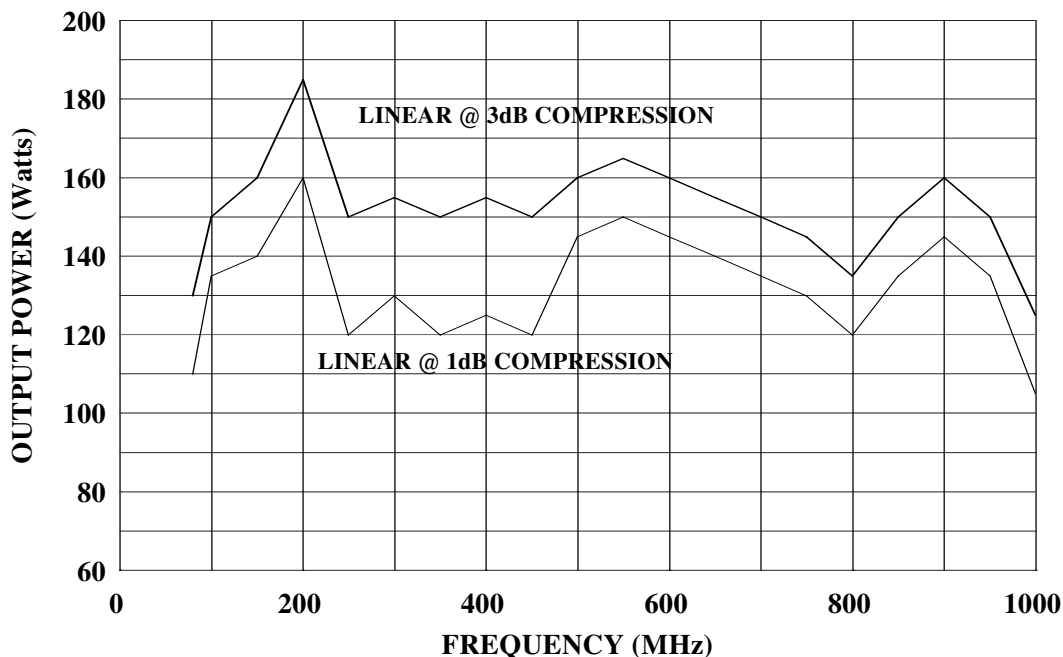
The Model 150W1000 is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 150W1000, when used with a sweep generator, will provide a minimum of 150 watts of RF power.

The Model 150W1000 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 which provides an output for use in self-testing or operational modes. Protection is provided by DC current level sensing and individual fusing of all output stages.

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

Housed in a stylish, contemporary bench top enclosure, the Model 150W1000 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. A safety interlock can be implemented via a rear panel connector.

150W1000 Typical Performance



SPECIFICATIONS, MODEL 150W1000

RATED OUTPUT POWER	150 watts
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
POWER OUTPUT @ 3dB compression	
Nominal	140 watts
Minimum	120 watts
POWER OUTPUT @ 1dB compression	
Nominal	120 watts
Minimum	100 watts
FLATNESS.....	±2.0 dB maximum; 1.5 dB typical; ±0.8 dB with internal leveling
FREQUENCY RESPONSE	80-1000 MHz instantaneously
GAIN (at maximum setting)	52 dB minimum
GAIN ADJUSTMENT (continuous range).....	18 dB minimum (4096 steps remote)
INPUT IMPEDANCE.....	50 ohms, VSWR 2.0:1 maximum
OUTPUT IMPEDANCE	50 ohms nominal
MISMATCH TOLERANCE *	Will operate without damage or oscillation with any magnitude and phase of source and load impedance. Will limit reflected power to 100 watts.
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION.....	Minus 20 dBc maximum at 100 watts
THIRD ORDER INTERCEPT POINT	58 dBm typical
RF POWER DISPLAY	0-200 watts
PRIMARY POWER (user must specify)	90 - 264 VAC 40/400Hz, single phase 1200 watts maximum
CONNECTORS	
RF.....	See Model Configurations
REMOTE INTERFACES	
IEEE-488.....	24 pin female
RS-232	9 pin Subminiature D (female)
ALC & PULSE	Type BNC on front panel
SAFETY INTERLOCK	15 pin Subminiature D
COOLING.....	Forced air (self contained fans)

* See Application Note #27

MODEL	RF INPUT	MODEL CONFIGURATIONS RF OUTPUT	WEIGHT	SIZE (W x H x D)
150W1000	Type N female on front panel	Type N female on front panel	40 Kg (88 lbs)	50.3 x 24.9 x 53.0 cm 19.8 x 9.8 x 21.1 in
150W1000M1	Type N female on rear panel	Type N female on rear panel	40 Kg (88 lbs)	50.3 x 24.9 x 53.0 cm 19.8 x 9.8 x 21.1 in
150W1000M2	Same as 150W1000 with enclosure removed for rack mounting		30 Kg (66 lbs)	48.3 x 22.2 x 53.0 cm 19 x 8.75 x 21.1 in
150W1000M3	Same as 150W1000M1 with enclosure removed for rack mounting		30 Kg (66 lbs)	48.3 x 22.2 x 53.0 cm 19 x 8.75 x 21.1 in
150W1000M4	Type N on front panel.	Type N on rear panel.	40 Kg (88 lbs)	50.3 x 24.9 x 53.0 cm 19.8 x 9.8 x 21.1 in
150W1000M5	150W1000M2 with gain control non adjustable – set to max gain		30 kg (66 lbs)	48.3 s 22.2 s 53.0 cm 19 x 8.75 x 21.1 in
150W1000M6	*See Individual Specification Sheet		*	*
150W1000M7	Same as 150W1000M4 with enclosure removed for rack mounting		30 Kg (66 lbs)	48.3 x 22.2 x 53.0 cm 19 x 8.75 x 21.1 in