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MODEL 250W1000A
M1, M2, M3, M4, M5, M6
250 WATTS CW
80 – 1000 MHz

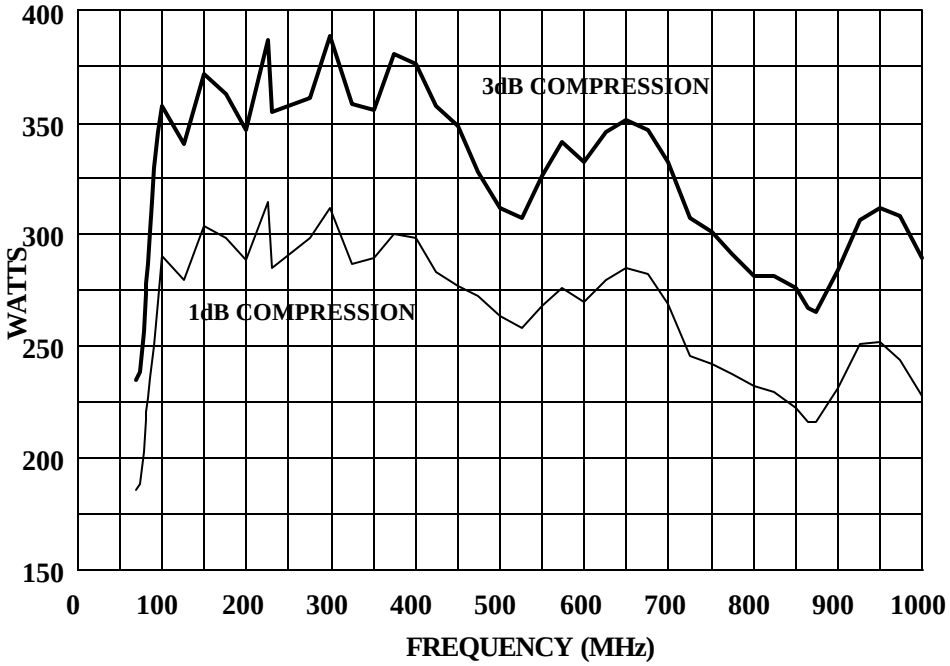
The Model 250W1000A is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 250W1000A, when used with a sweep generator, will provide a minimum of 250 watts of RF power.

The Model 250W1000A 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 hardwire 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.

Housed in a stylish, contemporary bench top enclosure, the Model 250W1000A 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.

250W1000A TYPICAL POWER OUTPUT



REV121602

SPECIFICATIONS
Model 250W1000A

RATED POWER OUTPUT ..... *250 watts minimum*

INPUT FOR RATED OUTPUT..... *1.0 milliwatt maximum*

POWER OUTPUT @ 3dB COMPRESSION
Nominal ..... *310 watts*
Minimum..... *250 watts*

POWER OUTPUT @ 1dB COMPRESSION
Nominal ..... *255 watts*
Minimum..... *200 watts*

FLATNESS..... *± 2.0 dB maximum*
± 1.5 dB typical

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

GAIN (at maximum setting)..... *54 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, VSWR 2.5:1 maximum*

MISMATCH TOLERANCE ..... *100% of rated power without foldback.*
Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

HARMONIC DISTORTION..... *Minus 20 dBc maximum at 200 watts*

THIRD ORDER INTERCEPT POINT..... *62 dBm typical*

PRIMARY POWER (user must specify)..... *120 - 240 VAC*
40/400Hz, single phase
2200 watts maximum

CONNECTORS
RF ..... *See Model Configurations*
REMOTE INTERFACES
IEEE-488 ..... *24 pin female*
RS-232 ..... *9 pin Subminiature D (female)*
Fiber Optic ..... *ST Conn Tx and Rx RS-232*
ALC & PULSE..... *Type BNC on front panel*

SAFETY INTERLOCK ..... *15 pin Subminiature D*

COOLING..... *Forced air (self contained fans)*

MODEL CONFIGURATIONS

MODEL NUMBER	*RF INPUT*	*RF OUTPUT*	*WIEGHT*	*SIZE (W x H x D)*
250W1000A	*Type N female on front panel*	*Type N female on front panel*	*86.2kg (190 lbs)*	*50.3 x 47.0 x 61.0cm* *19.8 x 18.5 x 24.0in*
250W1000AM1	*Type N female on rear panel*	*Type N female on rear panel*	*86.2 kg (190 lbs)*	*50.3 x 47.0 x 61.0cm* *19.8 x 18.5 x 24.0in*
250W1000AM2	*Same as 250W1000A with enclosure removed for rack mounting*		*68.0kg (150 lbs)*	*48.3 x 44.5 x 61.0cm* *19.0 x 17.5 x 24.0in*
250W1000AM3	*Same as 250W1000AM1 with enclosure removed for rack mounting*		*68.0kg (150 lbs)*	*48.3 x 44.5 x 61.0cm* *19.0 x 17.5 x 24.0in*
250W1000AM4	*Type N on front panel.*	*Type N on rear panel.*	*86.2kg (190lbs)*	*50.3 x 47 x 61cm* *19.8 x 18.5 x 24in*
250W1000AM5	*Same as 250W1000AM4 with enclosure removed.*		*68.0kg (150lbs)*	*48.3 x 44.5 x 61.0cm* *19.0 x 17.5 x 24.0in*
250W1000AM6	*Type N female on front panel*	*Type 7-16 female on rear panel*	*86.2Kg (190lbs)*	*50.3 x 47.0 x 61.0cm* *19.8 x 18.5 x24.0in*