

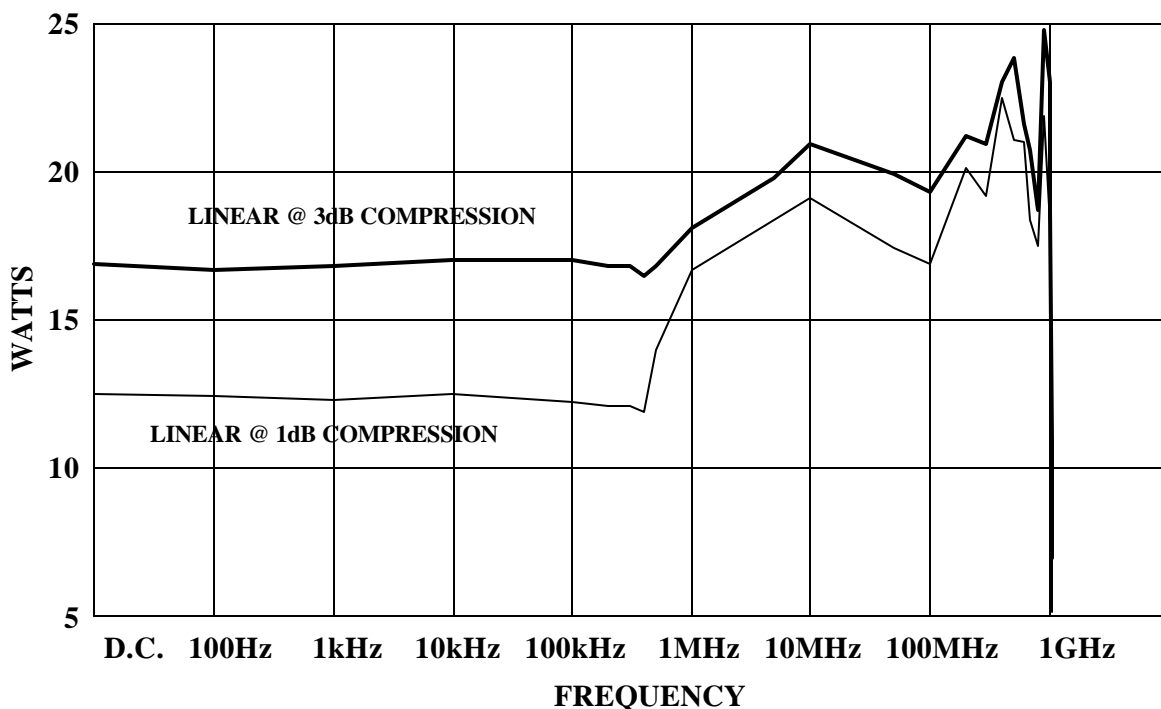


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MODELS 10WD1000
M1, M2, M3, M4
10 WATTS CW
DC - 1000 MHz

The Model 10WD1000 is a portable, self-contained, air-cooled, broadband, solid state amplifier designed for applications where extensive bandwidth and high gain are required. Push-pull circuitry is utilized in all of the high power stages in the interest of lowering distortion and improving stability. The Model 10WD1000 covers the frequency range from DC to 1000MHz in two bands. The low band covers from DC to 0.5MHz. The high band covers from 0.5MHz to 1000MHz. These bands can be selected automatically, manually or by remote control through the remote connector. The 10WD1000, when used with an RF sweep generator, will provide a minimum of 10 watts of swept power. The RF Amplifier stages are protected from over temperature by removing the DC voltage to them if an over temperature condition occurs due to cooling blockage or fan failure. There is a digital display on the front panel to indicate the operate status and fault conditions when an over temperature or power supply fault has occurred. The unit can be returned to operate when the condition has been cleared. The 10WD1000 includes digital control for both local and remote control of the amplifier. This 8-bit RISC microprocessor controlled board provides IEEE-488 (GPIB) and asynchronous full duplex RS-232 control of all amplifier functions.

10WD1000 TYPICAL POWER OUTPUT



SPECIFICATIONS
Model 10WD1000

RATED OUTPUT POWER	<i>15 watts minimum</i>
INPUT FOR RATED OUTPUT	<i>1.0 milliwatt maximum</i>
POWER OUTPUT @ 3dB COMPRESSION	
<i>Nominal</i>	<i>19 watts</i>
<i>Minimum</i>	<i>12.5 watts</i>
POWER OUTPUT @ 1dB COMPRESSION	
<i>Nominal</i>	<i>17watts</i>
<i>Minimum</i>	<i>10 watts</i>
FLATNESS	<i>±1.0 dB typical</i> <i>±1.5 dB maximum</i>
FREQUENCY RESPONSE	<i>DC-1000 MHz</i>
<i>(In two bands selected automatically, manually or buss)</i>	
GAIN	<i>40 dB minimum</i>
INPUT IMPEDANCE	<i>50 ohms, VSWR 2.0:1 maximum</i>
OUTPUT IMPEDANCE	<i>50 ohms, nominal</i>
MISMATCH TOLERANCE*	<i>100% of rated output power. Will operate without damage or oscillation or foldback with any magnitude and phase of source and load impedance.</i>
MODULATION CAPABILITY	<i>Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal</i>
HARMONIC DISTORTION	<i>Minus 20 dBc maximum at 10 watts</i>
THIRD ORDER INTERCEPT POINT	<i>50 dBm typical</i>
PRIMARY POWER (selected automatically)	<i>85 to 264 VAC</i> <i>47 to 440 Hz</i> <i>500 watts maximum</i>
REMOTE INTERFACES	<i>IEEE-488, RS-232</i>
CONNECTORS	
RF	<i>See Model Configurations</i>
REMOTE CONTROL	
IEEE-488	<i>24 pin female</i>
RS-232	<i>9 pin Subminiature D (female)</i>
SAFETY INTERLOCK	<i>15 Pin Subminiature D</i>
COOLING	<i>Forced air (self contained fans)</i>
WEIGHT	<i>See Model Configurations</i>
SIZE (WxHxD)	<i>See Model Configurations</i>
* See Application Note #27	

MODEL CONFIGURATIONS

MODEL NUMBER	RF INPUT	RF OUTPUT	WEIGHT	WEIGHT
<i>10WD1000</i>	<i>Type N female on front panel</i>	<i>Type N female on front panel</i>	<i>20.5 kg (45.0 lb)</i>	<i>50.3 x 15.5 x 37.6 cm</i> <i>19.8 x 6.1 x 14.8 in</i>
<i>10WD1000M1</i>	<i>Type N female on rear panel</i>	<i>Type N female on rear panel</i>	<i>20.5 kg (45.0 lb)</i>	<i>50.3 x 15.5 x 37.6 cm</i> <i>19.8 x 6.1 x 14.8 in</i>
<i>10WD1000M2</i>	<i>Same as 10WD1000 with enclosure removed for rack mounting</i>		<i>16.0 kg (35.0 lb)</i>	<i>48.3 x 12.7 x 37.6 cm</i> <i>19.0 x 5.0 x 14.8 in</i>
<i>10WD1000M3</i>	<i>Same as 10WD1000M1 with enclosure removed for rack mounting</i>		<i>16.0 kg (35.0 lb)</i>	<i>48.3 x 12.7 x 37.6 cm</i> <i>19.0 x 5.0 x 14.8 in</i>
<i>10WD1000M4</i>	<i>Same as 10WD1000M2 with slides for rack mounting</i>		<i>16.0 kg (35.0 lb)</i>	<i>48.3 x 12.7 x 37.6 cm</i> <i>19.0 x 5.0 x 14.8 in</i>

