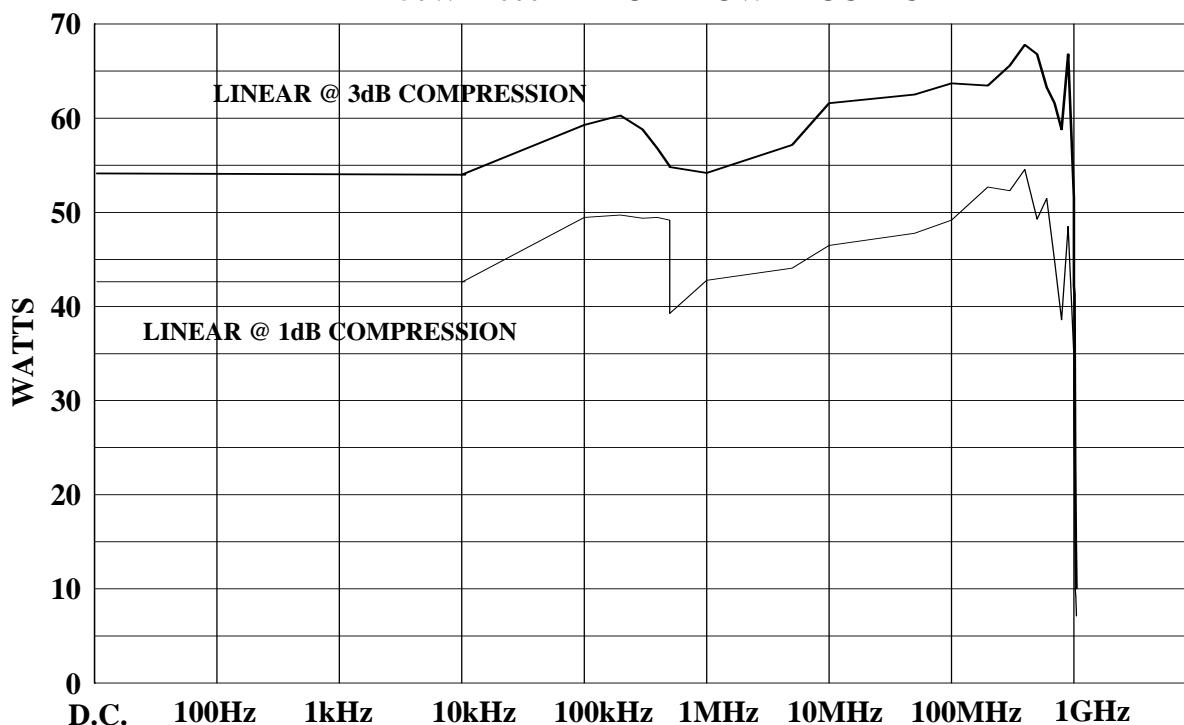




**Model 50WD1000,  
M1 through M3  
50 Watts CW  
DC-1000MHz**

The Model 50WD1000 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 50WD1000 covers the frequency range from D.C. 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 50WD1000, when used with an RF sweep generator, will provide a minimum of 50 watts of swept power. Provisions are included for the remote control of the basic operating functions of the amplifier. Computer control can be accomplished using our CP2001 or CP3000 accessories.

**50WD1000 TYPICAL POWER OUTPUT**



## SPECIFICATIONS, MODEL 50WD1000

|   |  |
|---|--|
| RATED OUTPUT POWER .....                          | 50 watts minimum   |
| INPUT FOR RATED OUTPUT .....                      | 1.0 milliwatt maximum  |
| <b>POWER OUTPUT @ 3dB COMPRESSION</b>             |  |
| Nominal .....                                     | 60 watts   |
| Minimum .....                                     | 40 watts   |
| <b>POWER OUTPUT @ 1dB COMPRESSION</b>             |  |
| Nominal .....                                     | 50 watts   |
| Minimum .....                                     | 30 watts   |
| FLATNESS.....                                     | ±1.0 dB typical<br>±1.5 dB maximum   |
| FREQUENCY RESPONSE .....                          | DC-1000 MHz  |
| (In two bands selected automatically or manually) |  |
| GAIN .....  | 47 dB minimum  |
| INPUT IMPEDANCE.....                              | 50 ohms, VSWR 2.0:1 maximum  |
| OUTPUT IMPEDANCE .....                            | 50 ohms, nominal   |
| MISMATCH TOLERANCE* .....                         | 100% of rated output power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.<br>* See <i>Application Note #27</i> |
| MODULATION CAPABILITY.....                        | Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.   |
| HARMONIC DISTORTION.....                          | Minus 20 dBc maximum at 35 watts   |
| THIRD ORDER INTERCEPT POINT .....                 | 56 dBm typical   |
| PRIMARY POWER (selected automatically).....       | 90 to 132; 180 to 264 VAC<br>50/60 Hz, single phase<br>700 watts maximum   |
| RF CONNECTORS .....                               | See Model Configuration  |
| REMOTE CONTROL.....                               | 25 Pin Subminiature D on rear panel  |
| COOLING.....                                      | Forced air (self contained fans)   |

| MODEL      | RF INPUT  | MODEL CONFIGURATION<br>RF OUTPUT | WEIGHT          | HEIGHT   |
|------------|---|----------------------------------|-----------------|--|
| 50WD1000   | Type N female on front panel                                | Type N female on front panel     | 29 Kg (64 lb)   | 50.3 x 24.9 x 45.7 cm<br>19.8 x 9.8 x 18.0 in  |
| 50WD1000M1 | Type N female on rear panel                                 | Type N female on rear panel      | 29 Kg (64 lb)   | 50.3 x 24.9 x 45.7 cm<br>19.8 x 9.8 x 18.0 in  |
| 50WD1000M2 | Same as 50WD1000 with enclosure removed for rack mounting   |                                  | 19.5 Kg (43 lb) | 48.3 x 22.2 x 45.7 cm<br>19.0 x 8.75 x 18.0 in |
| 50WD1000M3 | Same as 50WD1000M1 with enclosure removed for rack mounting |                                  | 19.5 Kg (43 lb) | 48.3 x 22.2 x 45.7 cm<br>19.0 x 8.75 x 18.0 in |