

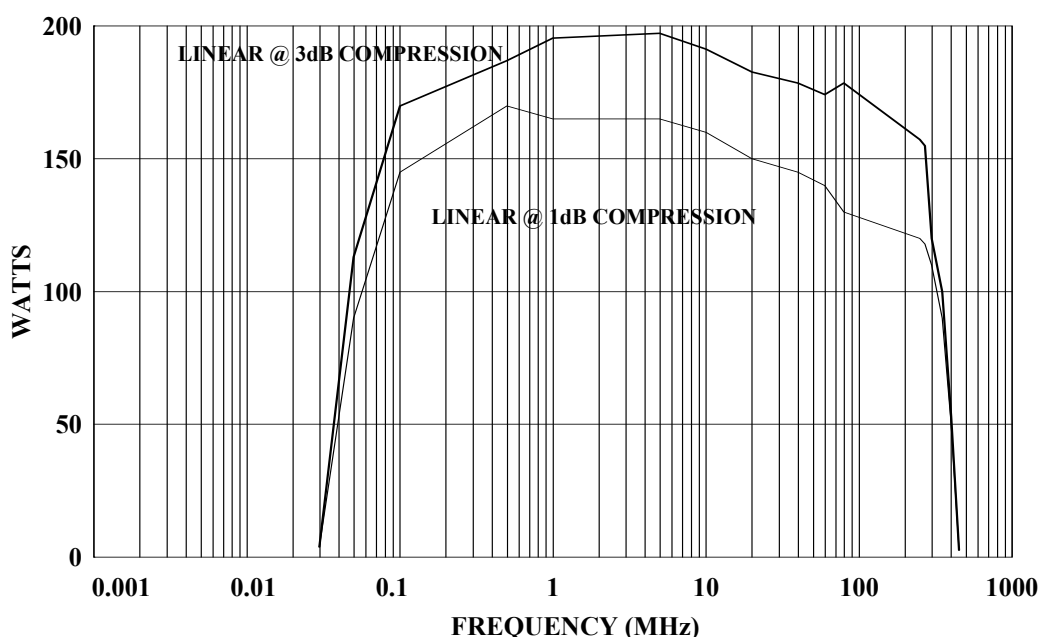
**Model 150A250,  
M1 through M6  
150 Watts CW**

The Model 150A250 amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 150A250, when used with an RF sweep generator, will provide a minimum of 150 watts of swept power.

There is a digital display on the front panel to indicate the operate status and fault conditions when an over temperature, power supply, or amplifier fault has occurred. The unit can be returned to operate when the condition has been cleared. The 150A250 includes digital control for both local and remote control of the amplifier. This 8-bit RISC microprocessor controlled board provides both IEEE-488 (GPIB) and asynchronous, full duplex RS-232 control of all amplifier functions.

Housed in a stylish, contemporary enclosure, the Model 150A250 provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and use as a driver for higher power amplifiers.

**150A250 TYPICAL POWER OUTPUT**



## SPECIFICATIONS, MODEL 150A250

|                                   |                                                                                                                                                                      |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RATED POWER OUTPUT .....          | 150 watts minimum                                                                                                                                                    |
| INPUT FOR RATED OUTPUT .....      | 1.0 milliwatt maximum                                                                                                                                                |
| POWER OUTPUT @ 3Db COMPRESSION    |                                                                                                                                                                      |
| Nominal .....                     | 180 watts                                                                                                                                                            |
| Minimum .....                     | 155 watts                                                                                                                                                            |
| POWER OUTPUT @ 1Db COMPRESSION    |                                                                                                                                                                      |
| Nominal .....                     | 150 watts                                                                                                                                                            |
| Minimum .....                     | 120 watts                                                                                                                                                            |
| FLATNESS.....                     | ± 1.5 dB maximum                                                                                                                                                     |
| FREQUENCY RESPONSE .....          | 100 kHz – 250 MHz instantaneously                                                                                                                                    |
| GAIN .....                        | 52 dB minimum                                                                                                                                                        |
| GAIN ADJUSTMENT RANGE .....       | 20 dB minimum                                                                                                                                                        |
| INPUT IMPEDANCE.....              | 50 ohms, VSWR 1.5:1 maximum                                                                                                                                          |
| OUTPUT IMPEDANCE .....            | 50 ohms, VSWR 2.0:1 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. See Application Note #27 |
| MODULATION CAPABILITY .....       | Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal                                                                                  |
| HARMONIC DISTORTION .....         | Minus 20 dBc maximum at 120 watts                                                                                                                                    |
| THIRD ORDER INTERCEPT POINT ..... | 58 dBm typical                                                                                                                                                       |
| PRIMARY POWER .....               | 90-135/180-270 VAC auto ranging 47-63Hz, single-phase.<br>1000 watts maximum                                                                                         |
| REMOTE INTERFACES .....           | IEEE-488, RS-232                                                                                                                                                     |
| CONNECTORS                        |                                                                                                                                                                      |
| RF input .....                    | Type N female                                                                                                                                                        |
| RF output .....                   | Type N female                                                                                                                                                        |
| Remote Control                    |                                                                                                                                                                      |
| IEEE-488 .....                    | 24 pin female                                                                                                                                                        |
| RS-232 .....                      | 9 pin subminiature D female                                                                                                                                          |
| COOLING.....                      | Forced air (self contained fans)                                                                                                                                     |
| REMOTE INTERLOCK .....            | 15 pin subminiature D                                                                                                                                                |
| WEIGHT, maximum .....             | See Model Configuration                                                                                                                                              |
| SIZE (WxHxD).....                 | See Model Configuration                                                                                                                                              |

| MODEL CONFIGURATION |                                                       |                      |                  |                                              |
|---------------------|-------------------------------------------------------|----------------------|------------------|----------------------------------------------|
| Model Number        | RF Input                                              | RF Output            | Weight           | Size (W x H x D)                             |
| 150A250             | Type N Female, front                                  | Type N Female, front | 31.75kg (70lb)   | 50.3 x 25.2 x 46.06cm<br>19.8 x 9.9 x 18.1in |
| 150A250M1           | Type N Female, rear                                   | Type N Female, rear  | 31.75kg (70lb)   | 50.3 x 25.2 x 46.0cm<br>19.8 x 9.9 x 18.1in  |
| 150A250M2           | Same as 150A250 without enclosure for rack mounting   |                      | 22.15kg (49.0lb) | 48.3 x 22.25 x 43.2cm<br>19 x 8.75 x 17in    |
| 150A250M3           | Same as 150A250M1 without enclosure for rack mounting |                      | 22.15 (49.0lb)   | 48.3 x 22.25 x 43.2cm<br>19 x 8.75 x 17in    |
| 150A250M4           | Type N Female, front                                  | Type N Female, rear  | 31.75kg (70lb)   | 50.3 x 25.2 x 46.06cm<br>19.8 x 9.9 x 18.1in |
| 150A250M5           | See Individual Specification Sheet                    |                      |                  |                                              |
| 150A250M6           | Same as 150A250M4 without enclosure for rack mounting |                      |                  |                                              |