

**Model 150A400**  
**M1 through M4**  
**150 Watts CW**  
**100kHz–400MHz**

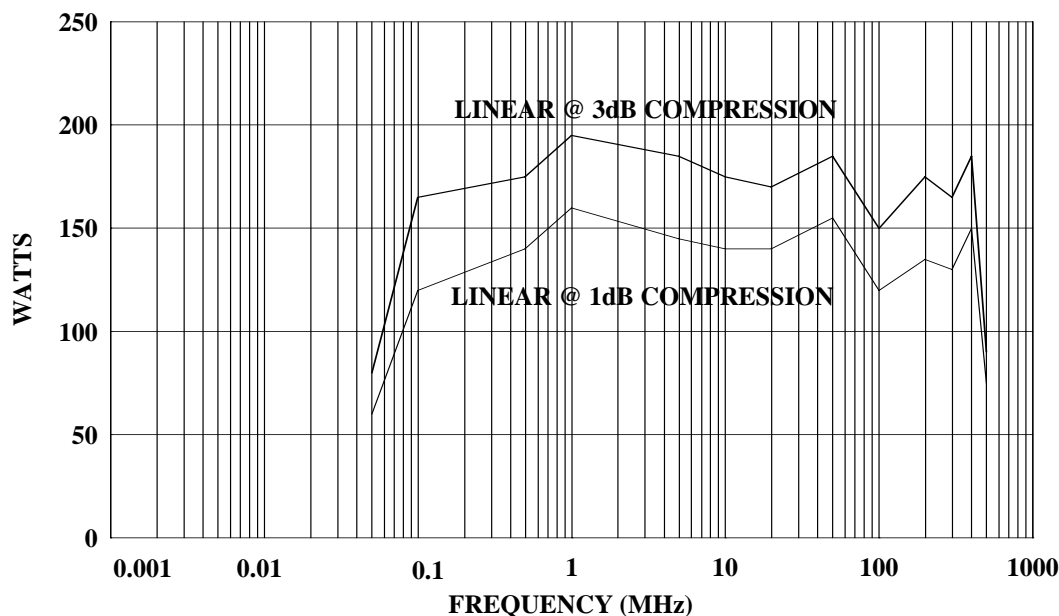
The Model 150A400 amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 150A400, 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 150A400 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.

All amplifier control functions and status indications are available remotely in GPIB / IEEE-488 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 enclosure, the Model 150A400 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.

**150A400 TYPICAL POWER OUTPUT**



## SPECIFICATIONS, MODEL 150A400

RATED POWER OUTPUT .....	150 watts minimum
INPUT FOR RATED OUTPUT .....	1.0 milliwatt maximum
<b>POWER OUTPUT @ 3dB COMPRESSION</b>	
Nominal .....	155 watts
Minimum .....	130 watts
<b>POWER OUTPUT @ 1dB COMPRESSION</b>	
Nominal .....	125 watts
Minimum .....	100 watts
FLATNESS .....	± 1.5 dB maximum
FREQUENCY RESPONSE .....	100 kHz - 400 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 nominal
MISMATCH TOLERANCE* .....	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
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
PRIMARY POWER .....	90-135/180-270 VAC auto ranging 47-63Hz, single-phase. 1000 watts maximum
REMOTE INTERFACES .....	IEEE-488, RS-232
<b>CONNECTORS</b>	
RF .....	See Model Configurations
<b>Remote Control</b>	
IEEE-488 .....	24 pin female
RS-232 .....	9 pin subminiature D female
COOLING .....	Forced air (self contained fans)
REMOTE INTERLOCK .....	15 pin subminiature D

\* See Application Note #27

## MODEL CONFIGURATIONS

MODEL	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
150A400	Type N female on Front Panel	Type N female on Front panel	36 Kg (80 lb)	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
150A400M1	Type N female on Rear Panel	Type N female on Rear panel	36 Kg (80 lb)	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
150A400M2	Same as 150A400 with enclosure removed for rack mounting		25 Kg (60 lb)	48.3 x 22.25 x 43.2 cm 19 x 8.75 x 17 in
150A400M3	Same as 150A400M1 with enclosure removed for rack mounting		25 Kg (60 lb)	48.3 x 22.25 x 43.2 cm 19 x 8.75 x 17 in
150A400M4	Type N female on Front Panel	Type N female on Rear panel	25 Kg (60 lb)	48.3 x 22.25 x 43.2 cm 19 x 8.75 x 17 in
	Enclosure removed for rack mounting			