



**Model 100A400,  
M1 through M3  
100 Watts CW  
100kHz–400MHz**

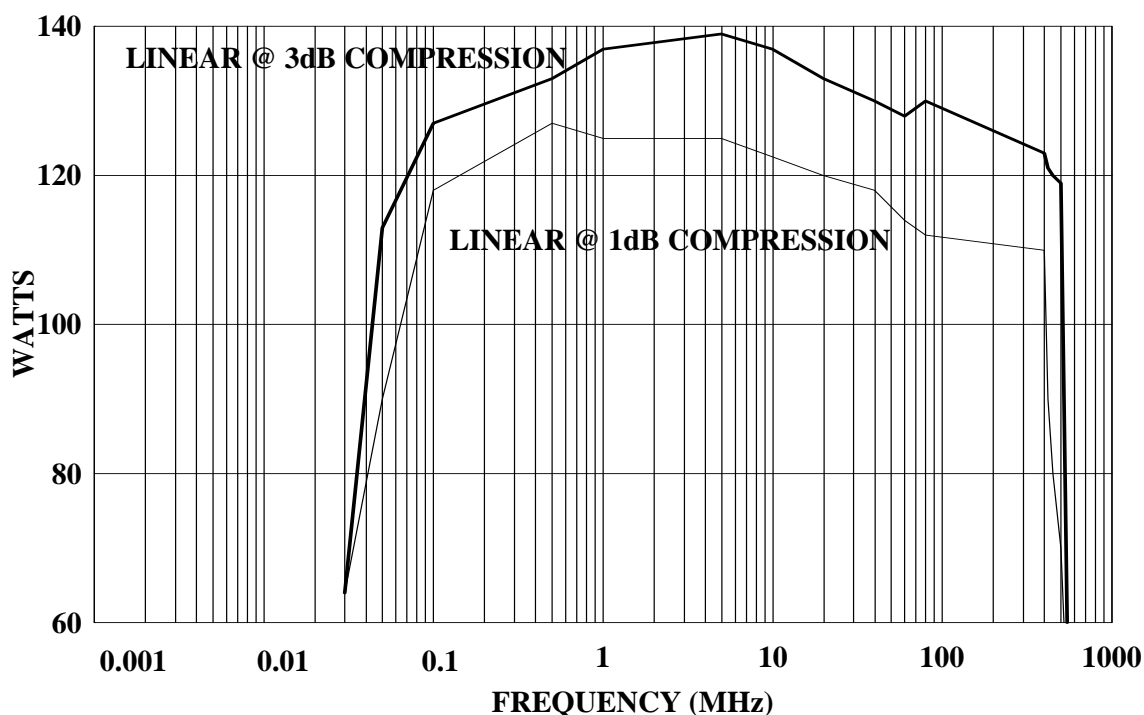
The Model 100A400 amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 100A400, when used with an RF sweep generator, will provide a minimum of 100 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 100A400 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 100A400 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.

**100A400 TYPICAL POWER OUTPUT**



## SPECIFICATIONS, MODEL 100A400

RATED POWER OUTPUT .....	100 watts minimum
INPUT FOR RATED OUTPUT .....	1.0 milliwatt maximum
<b>POWER OUTPUT @ 3dB COMPRESSION</b>	
Nominal .....	130 watts
Minimum .....	100 watts
<b>POWER OUTPUT @ 1dB COMPRESSION</b>	
Nominal .....	100 watts
Minimum .....	75 watts
FLATNESS .....	± 1.5 dB maximum
FREQUENCY RESPONSE .....	100 kHz - 400 MHz instantaneously
GAIN .....	50 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 the specified minimum 1dB compressed power
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 .....	Type N female. See Model Configurations for location.
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

### MODEL CONFIGURATIONS

MODEL	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
100A400	Front Panel	Front panel	36 Kg (80 lb)	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
100A400M1	Rear Panel	Rear panel	36 Kg (80 lb)	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
100A400M2	Same as 100A400 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
100A400M3	Same as 100A400M1 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