The Model 40AD1 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 40AD1, when used with an RF sweep generator will provide a minimum of 40 watts of swept power. The Model 40AD1 is direct coupled throughout, allowing very low frequency signals to be used.

Included is a front panel gain control which permits the operator to conveniently set the desired output level. Housed in a stylish, contemporary enclosure, the Model 40AD1 provides available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and use as a driver for high power amplifiers.

The Model 40AD1 amplifier uses universal input line voltage switching power supplies, thus allowing its use over a wide range of input voltages without wiring or switch position changes.

![40AD1 Typical Power Output](chart.png)
SPECIFICATIONS, MODEL 40AD1

POWER OUTPUT, CW
  Typical ................................................................. 50 watts
  Minimum ............................................................... 40 watts
  Linear @ 1dB compression ....................................... 25 watts minimum

FLATNESS .............................................................. ±1.5 dB max.

FREQUENCY RESPONSE ............................................ DC - 1MHz instantaneously

INPUT FOR RATED OUTPUT .......................................... 1.0 milliwatt maximum

GAIN (at maximum setting) ......................................... 45 dB minimum

GAIN ADJUSTMENT (continuous range) ......................... 18 dB minimum

INPUT IMPEDANCE .................................................... 50 ohms, VSWR 1.5:1 max.

OUTPUT IMPEDANCE .................................................. 50 ohms, VSWR 2.0:1 max.

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 ........................................... Maximum at 25 watts output, -25 dBc

THIRD ORDER INTERCEPT POINT ................................. 54 dBm, typical

PRIMARY POWER) .................................................... 90–135/180–270 VAC 50/60Hz single phase autoranging 400 watts maximum

CONNECTORS ................................................................ See Model Configurations

MODEL CONFIGURATION

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RF Input</th>
<th>RF Output</th>
<th>Weight</th>
<th>Size (WxHxD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40AD1</td>
<td>Type N female on front panel</td>
<td>Type N female on front panel</td>
<td>16 kg (35 lb)</td>
<td>50.3 x 15.5 x 30.0 cm 19.8 x 6.06 x 11.8 in</td>
</tr>
<tr>
<td>40AD1M1</td>
<td>Type N female on rear panel</td>
<td>Type N female on rear panel</td>
<td>16 kg (35 lb)</td>
<td>50.3 x 15.5 x 30.0 cm 19.8 x 6.06 x 11.8 in</td>
</tr>
<tr>
<td>40AD1M2</td>
<td>Same as 40AD1 with enclosure removed for rack mounting</td>
<td></td>
<td>11 kg (23 lb)</td>
<td>48.3 x 12.8 x 27.2 cm 19.0 x 4.96 x 10.7 in</td>
</tr>
<tr>
<td>40AD1M3</td>
<td>Same as 40AD1M1 with enclosure removed for rack mounting</td>
<td></td>
<td>11 kg (23 lb)</td>
<td>48.3 x 12.8 x 27.2 cm 19.0 x 4.96 x 10.7 in</td>
</tr>
</tbody>
</table>