The ATR80M6G is a wide band, high gain, log periodic antenna that is uniquely suited for use in both traditional applications as well as in new compact chambers. The proprietary design utilizing a “bent element” approach provides a size reduction of approximately 60% without sacrificing key electrical performance such as gain and beamwidth. The considerable size reduction minimizes field loss resulting from “room loading”. This is especially troublesome when conventional log periodics are used in small enclosures. The exceptionally broad frequency range addresses existing RF susceptibility requirements as well as anticipated future developments and is matched to work directly with AR “W” and “S” Series RF power amplifiers. The robust design can accommodate the high power levels necessary to generate significant E-fields. The ATR80M6G can also be calibrated for RF emissions testing. This antenna is built tough enough for outdoor use. The antenna comes with a wall bracket but can also be mounted, with its integral polarization change mount, on the TP1000B tripod. Included is a non-metallic mast 20 inches long for vertical mounting. This antenna also features removable elements for ease of transportation from one location to another. The ATR80M6G series allows polarization change without removing the antenna from the tripod.

**SPECIFICATIONS**

- **FREQUENCY** .......................................................... 80–6000 MHz
- **POWER GAIN (over isotropic)** ........................................ 6 dB
- **GAIN FLATNESS** ...................................................... ±1.5 dB
- **IMPEDANCE** ........................................................... 50 ohms nominal
- **VSWR** ................................................................. 3.0:1 (maximum), 2.0:1 (typical)
- **BEAMWIDTH (average)** .............................................. See graph
- **CONNECTOR** .......................................................... See Model Configurations
- **SIZE (W x H x D)** ................................................... 132.1 x 20.32 x 97.8 cm (52 x 8.0 x 38.5 in)
- **WEIGHT (maximum)** .............................................. 7.94 kg (17.5 lb)
- **EXPORT CLASSIFICATION** ....................................... EAR99

**MODEL CONFIGURATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR80M6G</td>
<td>N female</td>
</tr>
<tr>
<td>ATR80M6GM1</td>
<td>C female</td>
</tr>
<tr>
<td>ATR80M6GM2</td>
<td>7-16 female</td>
</tr>
<tr>
<td>ATR80M6GM3*</td>
<td>1-5/8 EIA female</td>
</tr>
<tr>
<td>ATR80M6GM4**</td>
<td>Same as base model with calibrations</td>
</tr>
</tbody>
</table>

*The 1-5/8 EIA connector is limited to 3000MHz
**1 meter/3meter/10 meter horizontal/vertical A2LA calibration
Model Configurations and Power Rating

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<td>1 5/8 EIA female</td>
</tr>
</tbody>
</table>

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3 dB Beamwidth

E-Plane

H-Plane

ATR80M6G  1M Field Strength

Field Strength, V/M

5000 Watts
2000 Watts
1000 Watts
500 Watts
200 Watts
100 Watts
5 Watts
2 Watts
1 Watt

Frequency, MHz
Field strength has been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.