



**Model ATR80M6G Antenna,
M1 through M4
80-6000MHz**

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

- FREQUENCY80-6000 MHz
- POWER GAIN (over isotropic)6 dB
- GAIN FLATNESS ±1.5 dB
- IMPEDANCE50 ohms nominal
- VSWR3.0:1 (maximum), 2.0:1 (typical)
- BEAMWIDTH (average).....See graph
- CONNECTORSee 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 CLASSIFICATIONEAR99

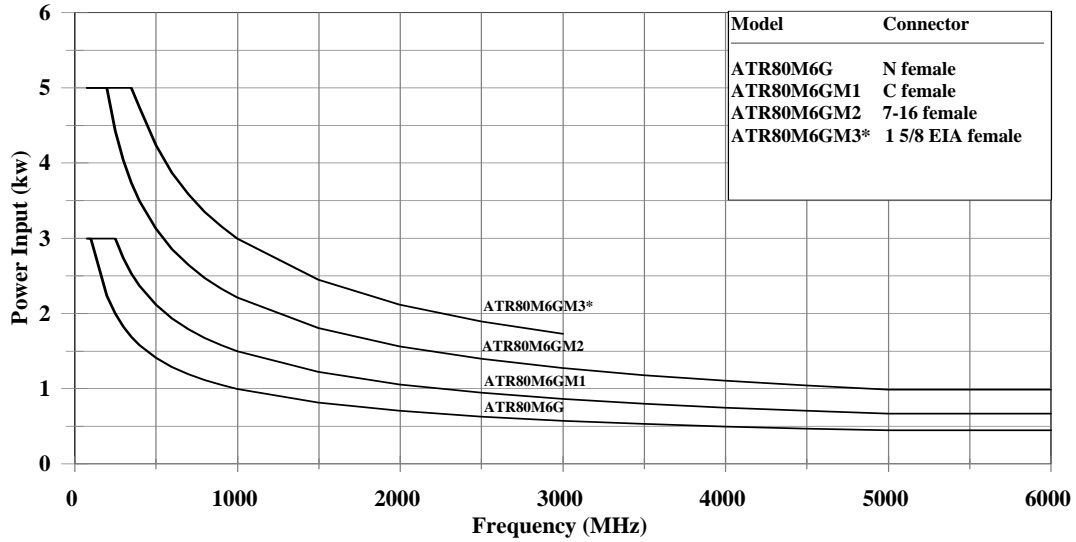
MODEL CONFIGURATIONS

Model	Connector
ATR80M6G	N female
ATR80M6GM1	C female
ATR80M6GM2	7-16 female
ATR80M6GM3*	1-5/8 EIA female
ATR80M6GM4**	Same as base model with calibrations

*The 1-5/8 EIA connector is limited to 3000MHz

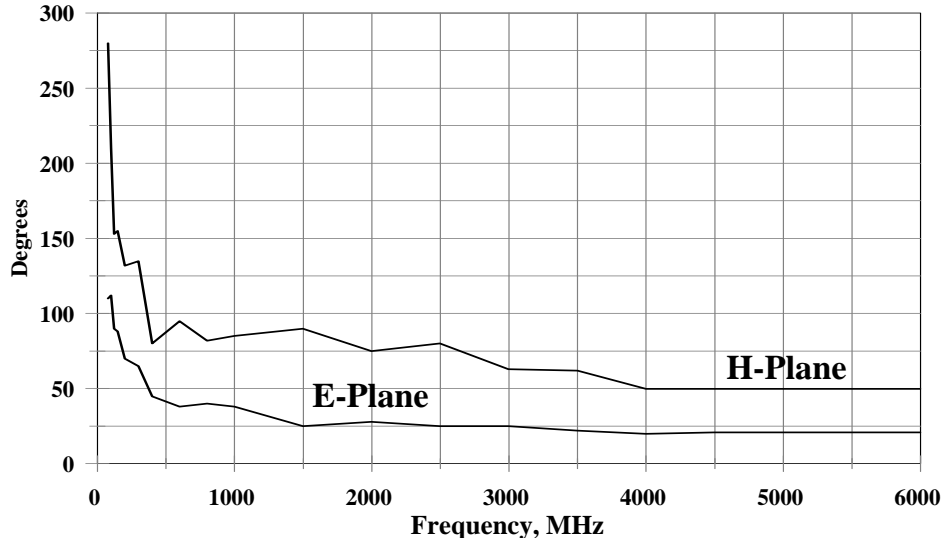
**1 meter/3meter/10 meter horizontal/vertical A2LA calibration

Model Configurations and Power Rating

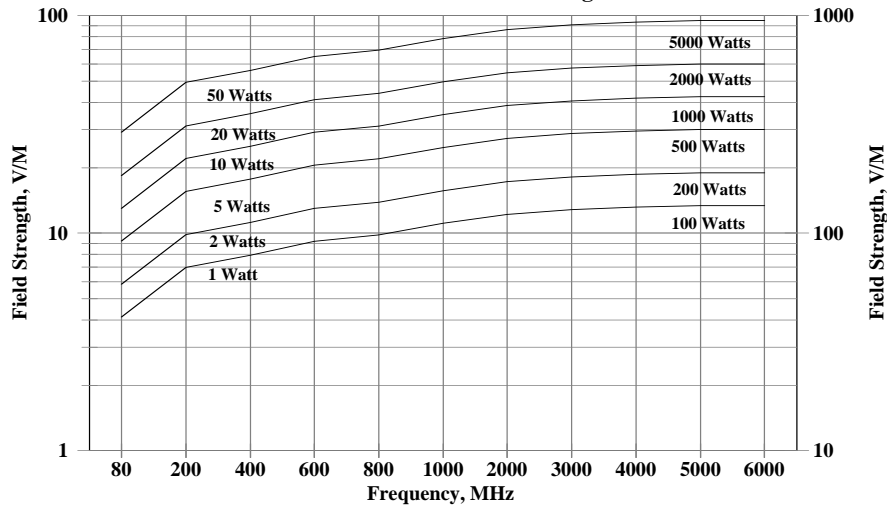


* The 1 5/8 EIA connector is limited to 3000 MHz

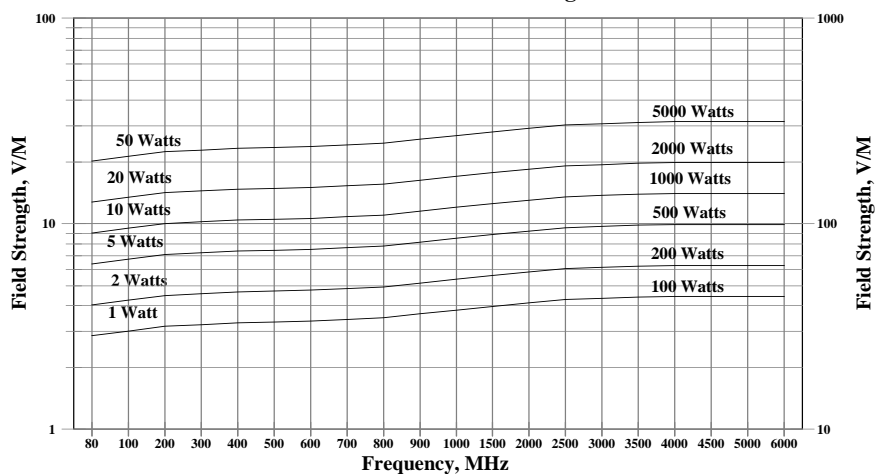
3 dB Beamwidth



ATR80M6G 1M Field Strength



ATR80M6G 3M Field Strength



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.