



## ATR80M6G

- M1-M5
- Antenna
- 80–6000MHz

### Features

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.

The ATR80M6G can also be custom calibrated to the user’s requirement for use in RF emission testing. The calibrated model is designated by adding a ‘CC’ suffix to the model. Calibration details must be provided using Form 701. Contact factory for details.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

### Specifications

**FREQUENCY RANGE:** 80-6000 MHz

**FAR FIELD GAIN (typical):** 6 dBi

**GAIN FLATNESS:**  $\pm 2$  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:** 7.94 kg, 17.5 lbs

**EXPORT CLASSIFICATION:** EAR99

#### MODEL CONFIGURATIONS

Model	Connector
ATR80M6G	N female
ATR80M6GM1	C female
ATR80M6GM2	7-16 female
ATR80M6GM3*	1-5/8 EIA
ATR80M6GM5	SC Female

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

#### AR RF/Microwave Instrumentation

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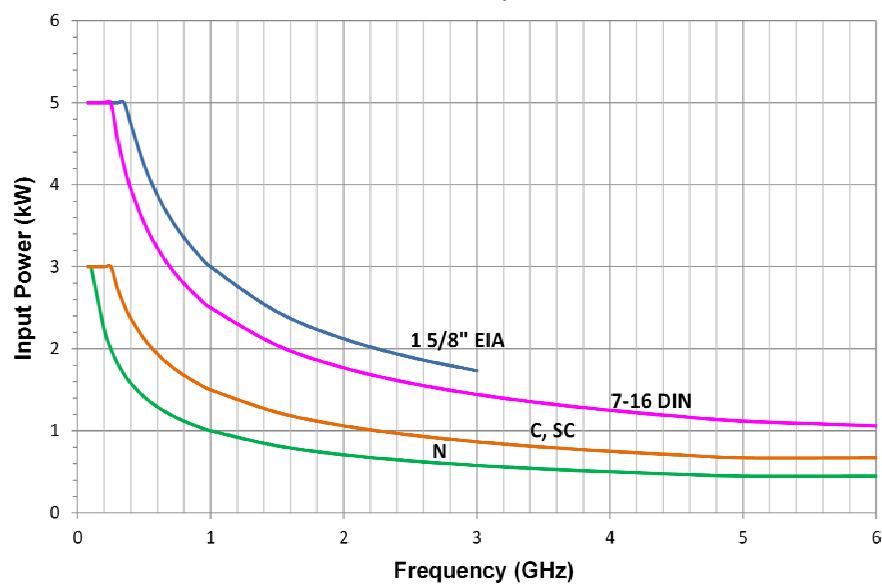
www.arworld.us



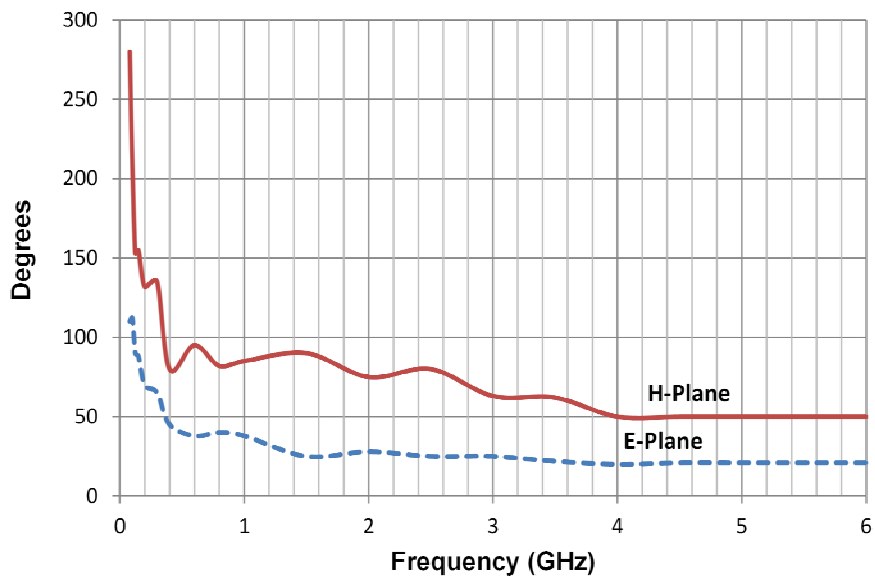
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ATR80M6G Input Power

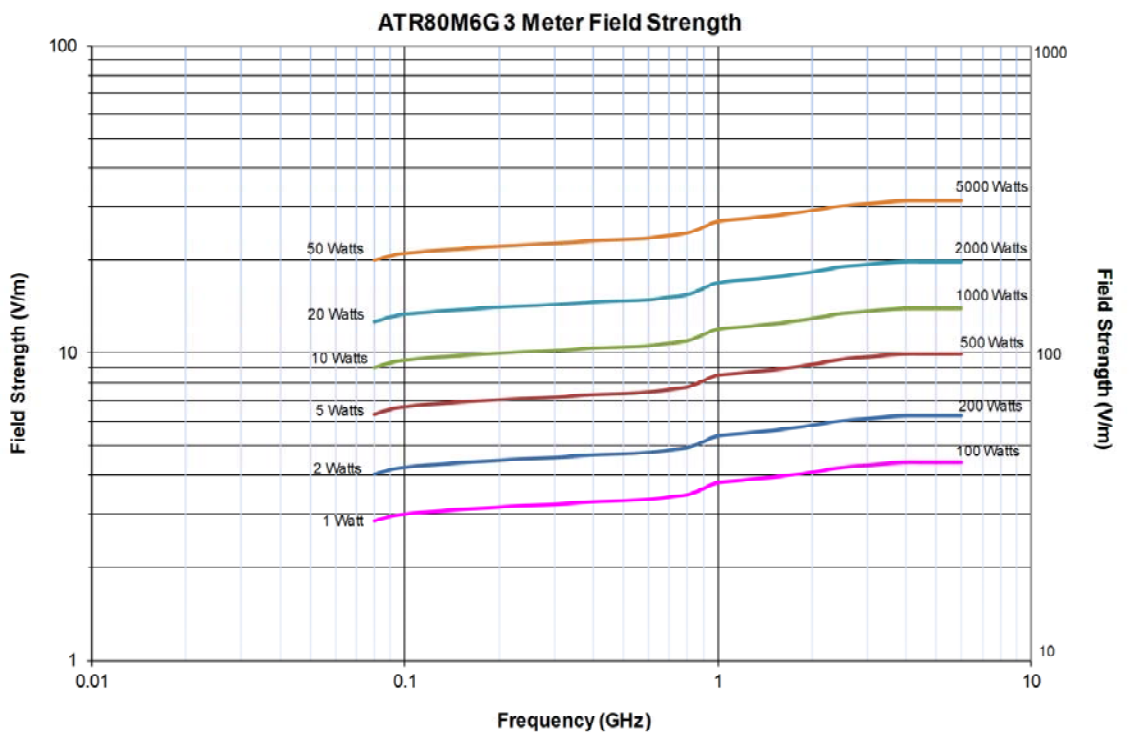
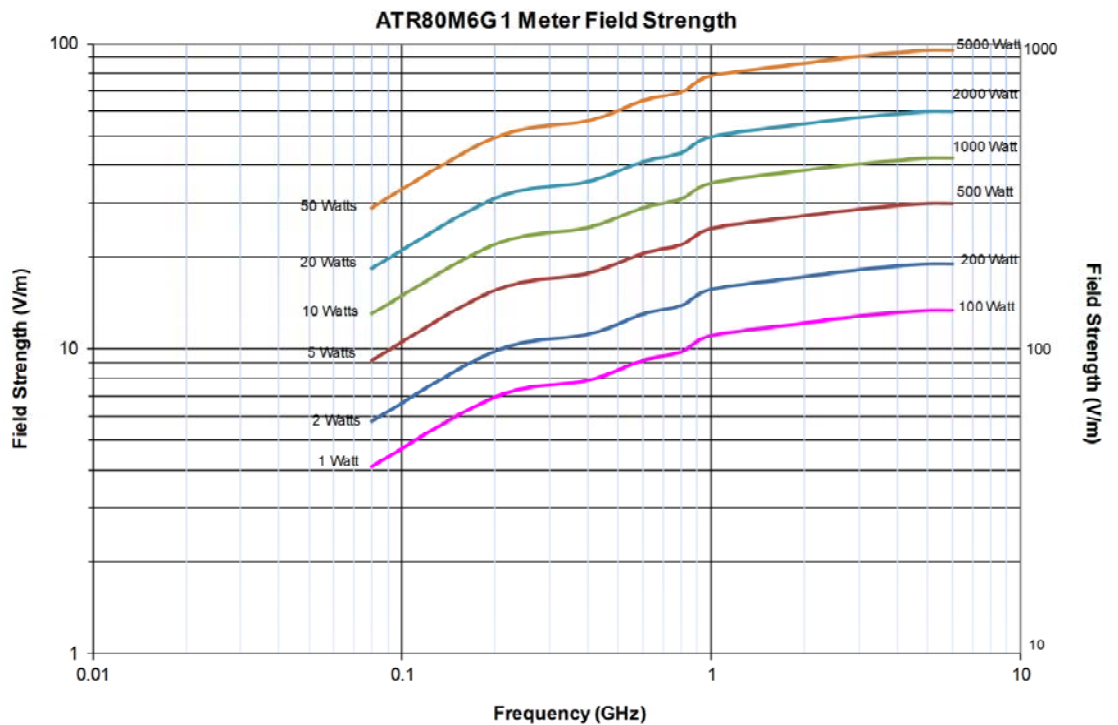


ATR80M6G 3dB Beamwidth



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Field strengths have 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 environment.