

rf/microwave instrumentation

Model ATR26M6G M1 through M4 Radiant Arrow Antenna 26MHz-6000MHz

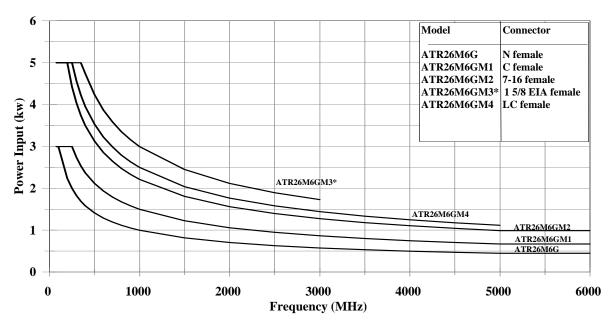
The Model ATR26M6G is a wide band, high gain, radiant arrow, log periodic antenna that is uniquely suited for use in both traditional applications as well as in new compact chambers. The proprietary design utilizing a "bent element" approach provides a size reduction of approximately 60% without sacrificing 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's "W", "S" and "A" series RF power amplifiers. The robust design can accommodate the high power levels necessary to generate significant E-fields. The ATR26M6G 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 AP5010B antenna positioner. Included are two non-metallic masts, 4 feet and 6 feet for vertical mounting.

The Model ATR26M6G allows polarization change (90° rotation) without removing the antenna from its positioner.

SPECIFICATIONS

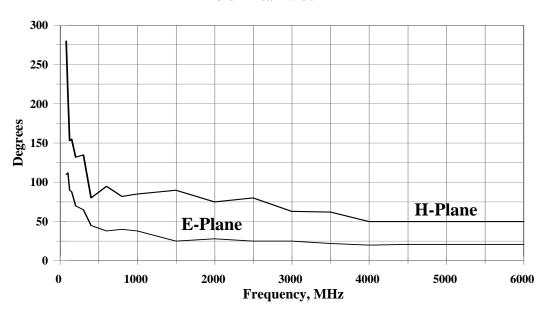
FREQUENCY	26–6000 MHz
POWER INPUT, CW	See graph
POWER GAIN (over isotropic)	6 dB (80–6000 MHz) -3 to 6 dB (26–80 MHz)
GAIN FLATNESS	±1.5 dB (80–6000 MHz)
IMPEDANCE	50 ohms nominal
VSWR (maximum)	3.0:1 (80–6000 MHz) 10:1 (26–80 MHz)
BEAMWIDTH (average)	See graph
CONNECTOR	See model configurations
SIZE (W x H x D)	279.4 x 53.6 x 202.4 cm (110 x 21.1 x 79.7 in)
WEIGHT (maximum)	22.5 kg (50 lb)

Model Configurations and Power Rating

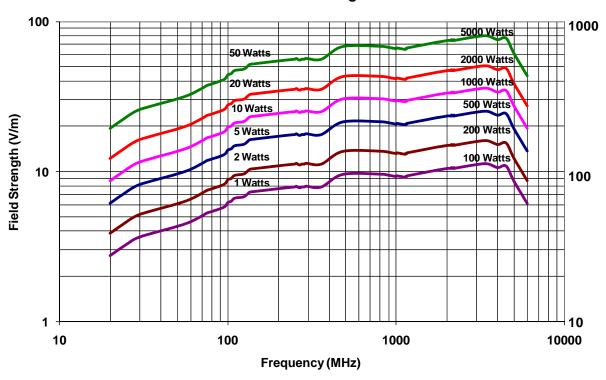


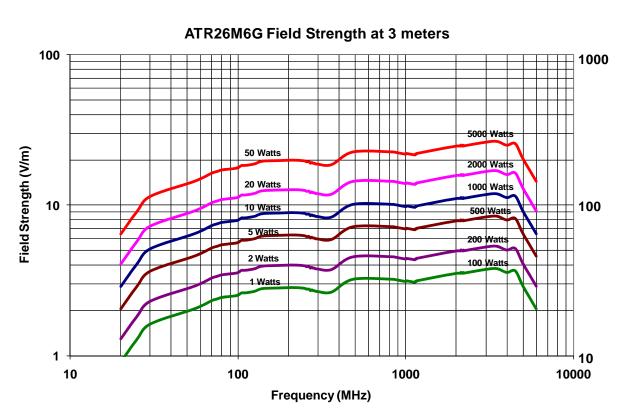
^{*} Upper frequency limitation for 1 5/8 EIA connector is 3 GHz.

3 dB Beamwidth



ATR26M6G Field Strength at 1 meter





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.