

rf/microwave instrumentation

Model ATR26M6G-1 Radiant Arrow Antenna 26MHz-6000MHz

The Model ATR26M6G-1 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 combined with additional innovations, provides a size reduction of approximately 75% without sacrificing key electrical performance

such as gain and beamwidth. The ATR26M6G-1 features a reduced profile and extremely low VSWR making it an excellent choice for high field-strength immunity testing. The considerable size reduction minimizes field loss resulting from "room loading". This is especially troublesome when conventional log periodics are used in moderate-size 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-1 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 in two perpendicular planes with the AP5010B antenna positioner. Included are two non-metallic masts, 4 feet and 6 feet for vertical mounting. The ATR26M6G-1 can also be mounted on the TP1000BM3 tripod with ballast tray.

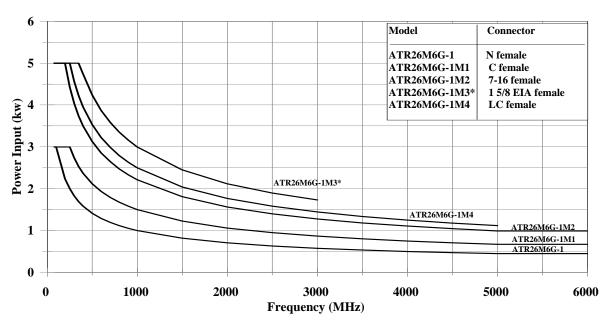


The Model ATR26M6G-1 antenna allows polarization change without removing the antenna from its positioner.

SPECIFICATIONS

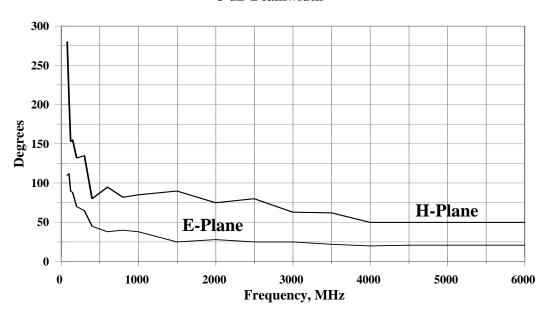
FREQUENCY	.26–6000 MHz
POWER INPUT, CW	.See graph
POWER GAIN (over isotropic)	4 to 6 dB (26–80 MHz) 6 dB (80–6000 MHz)
GAIN FLATNESS	.±3.75 dB (26–80 MHz) ±1.5 dB (80–6000 MHz)
IMPEDANCE	.50 ohms nominal
VSWR (maximum)	.6.0:1 (26–80 MHz) 3.0:1 (80–6000 MHz)
BEAMWIDTH (average)	.See graph
CONNECTOR	.See model configurations
SIZE (W x H x D)	.218.4 x 73.7 x 161.3 cm (86 x 29 x 63.5 in)
WEIGHT (maximum)	.13.6 kg (30 lb)

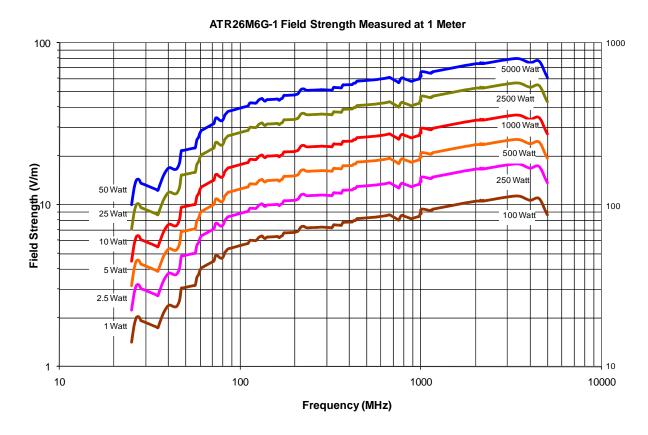
Model Configurations and Power Rating

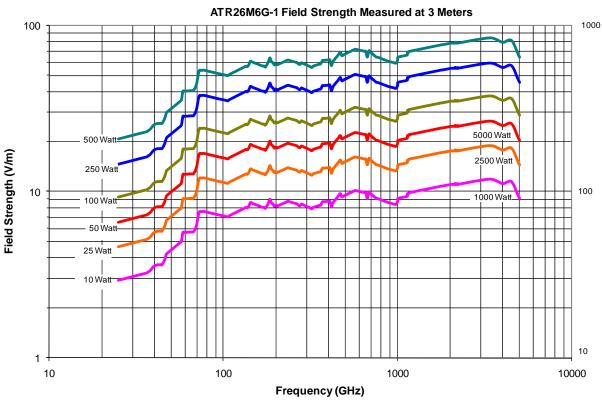


^{*} Upper frequency limitation for 1 5/8 EIA connector is 3 GHz.

3 dB Beamwidth







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.