rf/microwave instrumentation



Model ATR26M1G Radiant Arrow Antenna 26MHz–1000MHz

The Model ATR26M1G 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 ATR26M1G 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" and "A" series RF power amplifiers. The robust design can accommodate the high power levels necessary to generate significant E-fields. 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.

The ATR26M1G 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 Model ATR26M1G antenna allows polarization change without removing the antenna from its positioner.

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 | 26–1000 MHz |
| POWER INPUT, CW | 20 kW@ 26 MHz, derate to 5 kW @ 1000 MHz |
| POWER GAIN (over isotropic) | 8 to 0 dB (26–80 MHz) 0-6 dB (80–1000 MHz) |
| GAIN FLATNESS | ±3 dB (80–1000 MHz) |
| IMPEDANCE | 50 ohms nominal |
| VSWR (maximum) | 6.0:1 (26–80 MHz) 3.5:1 (80–1000 MHz) |
| BEAMWIDTH | See graph |
| CONNECTOR | 1-5/8 EIA m/f |
| SIZE (W x H x D) | 231 x 66 x 183 cm (91 x 26 x 72 in) |
| WEIGHT (maximum) | 29.5 kg (65 lb) |
| EXPORT CLASSIFICATION | EAR99 |

ATR26M1G Input Power



ATR26M1G 3 dB Beamwidth Degrees 120 E-Plane _ H-Plane _ Frequency (MHz)

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ATR26M1G Field Strength Measured at 1 Meters



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.