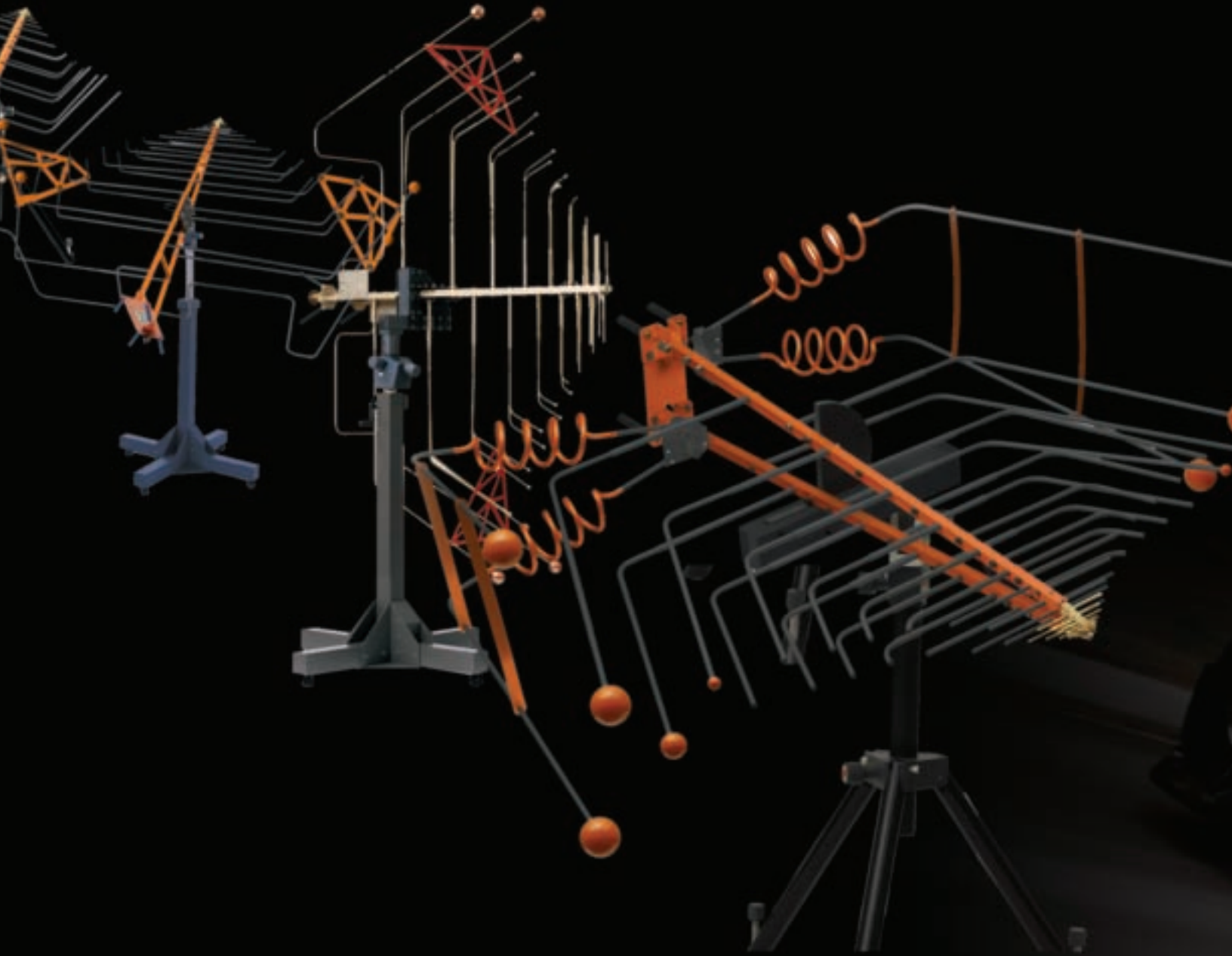


We've Bent The Rules.



AR's Bent-Element Approach Provides A Size Reduction Of Up To 75%, Along With Great Performance.

AR is doing incredible things with antennas. For starters, we've advanced the science of log periodic antennas with our patented Radiant Arrow design.

Our Radiant Arrow bent element antennas – for fields from 26 MHz to 6,000 MHz – are about 60% smaller, lighter and more compact than standard log periodic antennas. Yet they cover broad frequency ranges, offer up to 6dBi gain, and produce high fields even in the toughest applications. The smaller size not only makes them more portable, it minimizes field loss from “room loading.”

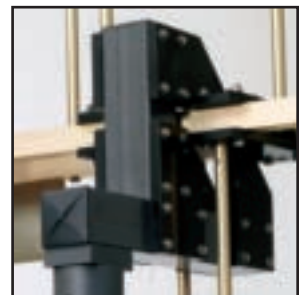
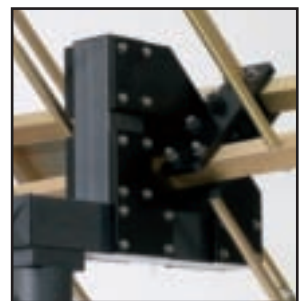
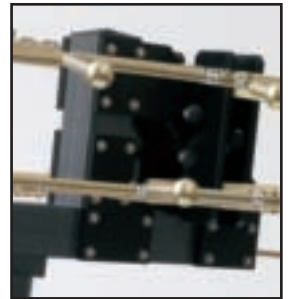
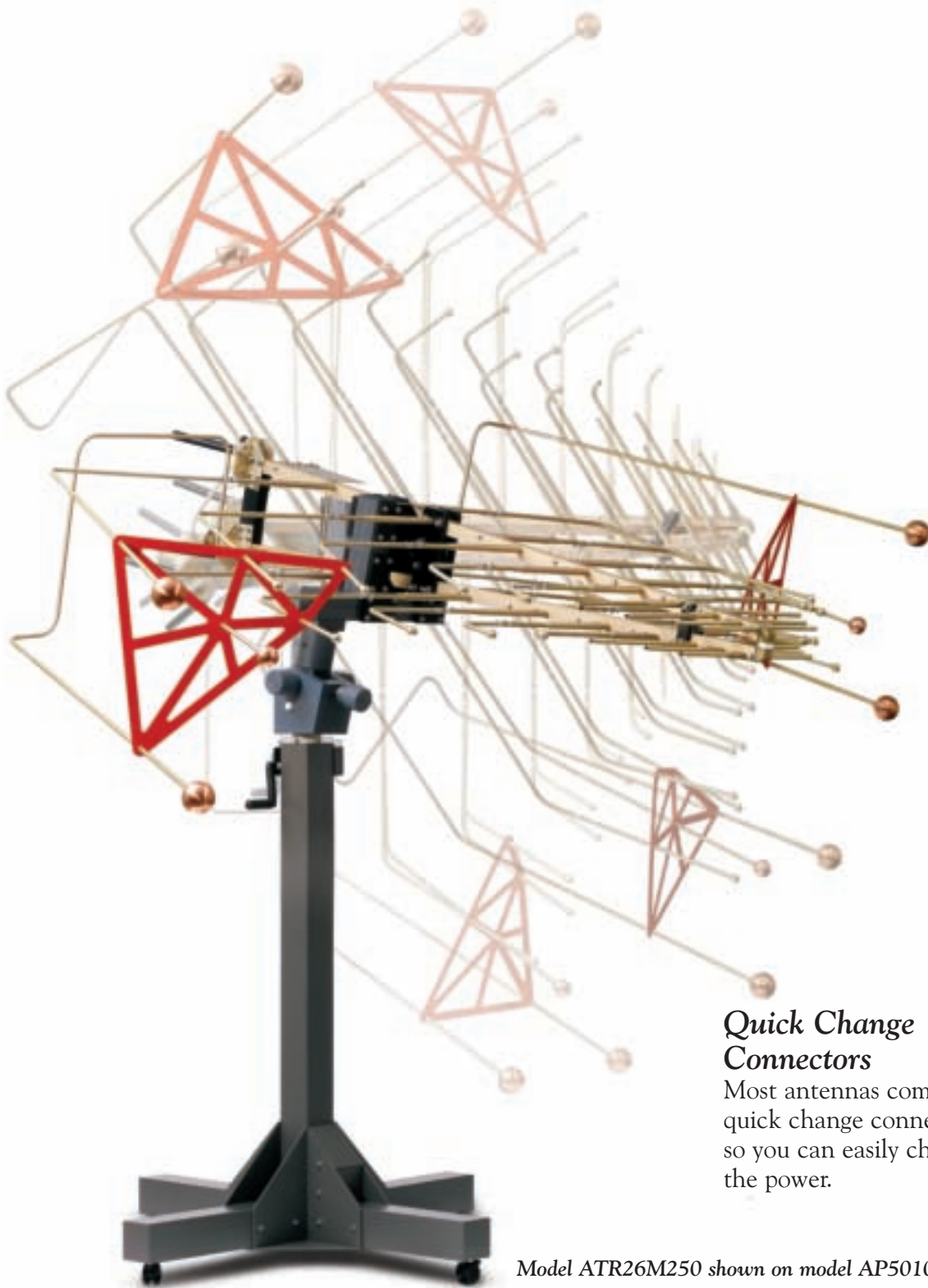
Our newest Radiant Arrow antenna pushes the boundaries even farther. The ATR26M6G-1 (26 – 6,000 MHz / 5,000 watts input power) goes beyond existing susceptibility requirements, so it's ready for future developments. And the robust design accommodates the high power levels needed to generate significant E-fields.

AR is also THE source for microwave and RF horn antennas, broadband log periodics, and antennas for HIRF testing. Antennas are available up to 50 GHz and 15,000 watts of input power. All AR antennas develop high fields, suitable for RF and EMC testing; and many models can be calibrated for emissions testing.

All our antennas are frequency and power-matched to AR amplifiers, so it's easy to select the right unit.



Radiant Arrow Antennas That Take Technology



Quick Change Connectors

Most antennas come with quick change connectors so you can easily change the power.

Model ATR26M250 shown on model AP5010B Antenna Positioner



AR has advanced the science of log-periodic antennas with the unique, patented design of our Radiant Arrow bent element antennas - for fields from 26 MHz to 6 GHz.

This exceptional family of antennas includes the ATR80M6G (80 MHz - 6 GHz, 5,000 watts input power), the ATR26M6G and ATR26M6G-1 (26 MHz - 6 GHz, 5,000 watts input power) and the ATR26M250 (26 MHz - 250 MHz, 15K watts input power).

The Radiant Arrows utilize a “bent-element” approach that provides a size reduction up to 75% without sacrificing key electrical performance such as gain or bandwidth. The size reduction minimizes field loss resulting from “room loading” - which is especially troublesome when conventional log-periodic antennas are used in small enclosures. All four models feature a vertical to horizontal pivot to allow bore sight rotation without removing an element from the antenna or removing the antenna from the AR positioner.

Remove a pin and easily rotate the antenna to the desired position.



Radiant Arrow Antenna



ATR26M6G-1

26 MHz to 6 GHz

The new Model ATR26M6G-1 is uniquely suited for use in both traditional applications and in compact test chambers. Its exceptionally broad frequency range addresses existing RF susceptibility requirements as well as anticipated developments. The ATR26M6G-1 features a 75% size reduction over standard log periodic antennas covering this frequency range. It 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. The antenna comes with a wall bracket, but it can also be mounted, with its integral polarization change mount, on the AP5010B antenna positioner, or the TP1000BM3 with ballast tray.

Specifications

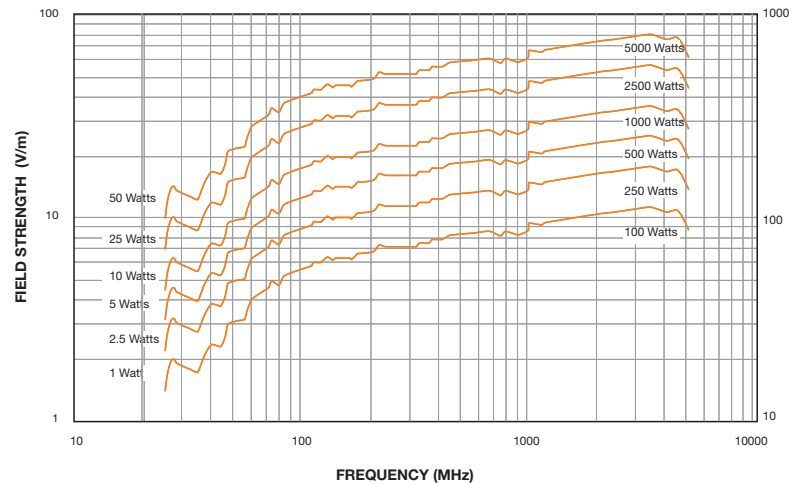
ATR26M6G-1

Frequency range	26 MHz - 6 GHz
Power input (max.)	5000 watts
Power gain (over isotropic)	-4 to 6 dB (26 - 80 MHz) 6 dB (80 MHz - 6 GHz)
Gain flatness	± 3.75 dB (26 - 80 MHz) ± 1.5 dB (80 MHz - 6 GHz)
Impedance	50 ohms nominal
VSWR (max.)	6:1 (26 - 80 MHz) 3:1 (80 MHz - 6 GHz)
Beamwidth (average)	Typical curves available on request
Front to back ratio (min.)	15 dB
Connector	Type N (F) quick change connector; Type C (F) supplied for higher power applications
Size (W X H X D)	218.4 x 73.7 x 161.3 cm (86 x 29 x 63.5 in)
Weight (max.)	13.6 kg (30 lb)
Mounting	Wall bracket included. May also be mounted using the optional AP5010B antenna positioner or the TP1000BM3 tripod with ballast tray. Also includes 2 non-metallic masts (4 and 6 feet) vertical mounting.

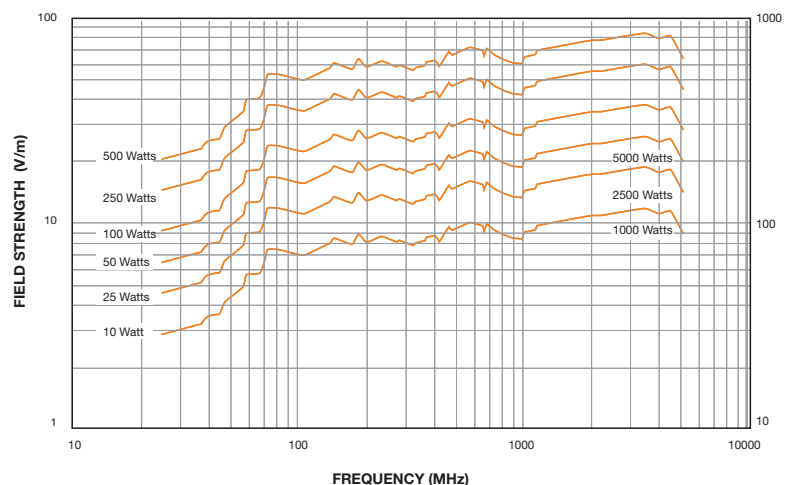
Field strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.

ATR26M6G-1

FIELD STRENGTH MEASURED AT 1 METER



FIELD STRENGTH MEASURED AT 3 METER



The Most Advanced Antennas For Radiated

a: ATR80M6G - 80 MHz to 6 GHz

b: ATR26M6G - 26 MHz to 6 GHz

c: ATR26M250 - 26 to 250 MHz

Our Radiant Arrows offer up to 6dBi gain and produce high fields even in the toughest applications. They can also be calibrated for emissions testing. These efficient, compact, portable antennas represent the innovative thinking and exceptional products that have earned AR the Number One position in the industry.

Antenna Mounting Adapters

Available for older versions of the AT1000, AT1080 and AT5080 antennas. Allows for vertical & horizontal polarization changes without removing the antenna from the tripod.

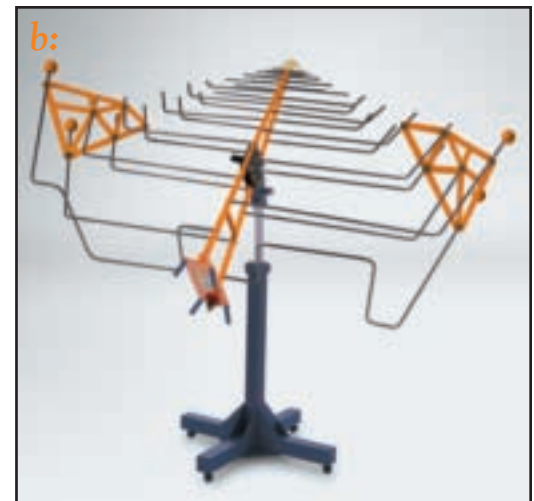
Specifications	ATR80M6G	ATR26M6G	ATR26M250
Frequency range	80 MHz - 6 GHz	26 MHz - 6 GHz	26 - 250 MHz
Power input (max.)*	5,000 watts	5,000 watts	15,000 watts
Power gain (over isotropic)	6 dBi	-3 to +6 dBi (26 - 80 MHz) 6 dBi (80 MHz - 6 GHz)	-3 to +6 dBi (26 - 80 MHz) 6 dBi (80 - 250 MHz)
Gain flatness	±1.5 dBi	±1.5 dBi (80 - 6 GHz) ±3.75 dBi (26 - 80 MHz)	±1.5 dBi (80 - 250 MHz) ±3.75 dBi (26 - 80 MHz)
Impedance	50 ohms nominal	50 ohms nominal	50 ohms nominal
VSWR (max.)	3:1 2:1 (typical)	3:1 (80 - 6 GHz) 10:1 (26 - 80 MHz)	3:1 (80 - 250 MHz) 10:1 (26 - 80 MHz)
Beamwidth (avg.)	Typical curves available on request	Typical curves available on request	Typical curves available on request
Connector	Type N (F) quick change connector	Type N (F) quick change connector	1 5/8 EIA
Size (W X H X D)	132.1 x 20.32 x 97.8 cm (52 x 8 x 38.5 in)	279.4 x 53.6 x 202.4 cm (110 x 21.1 x 79.7 in)	279.4 x 53.6 x 202.4 cm (110 x 21.1 x 79.7 in)
Weight (max.)	7.94 kg (17.5 lb)	22.7 kg (50 lb)	31.8 kg (70 lb)
Mounting	Wall bracket included. May also be tripod mounted in two perpendicular planes using optional tripod. Also includes one non-metallic mast for vertical mounting.	Wall bracket included. May be mounted in two perpendicular planes using an optional antenna positioner (AP5010B). Two non-metallic masts (4 and 6 foot) are included for vertical mounting	Wall bracket included. May be mounted in two perpendicular planes using an optional antenna positioner (AP5010B). One non-metallic mast (4 foot) is included for vertical mounting

*Connector and frequency dependent. Contact factory for details.

Typical gain charts and antenna patterns are available for most antennas. Contact factory for more information.



Shown on model TP1000B



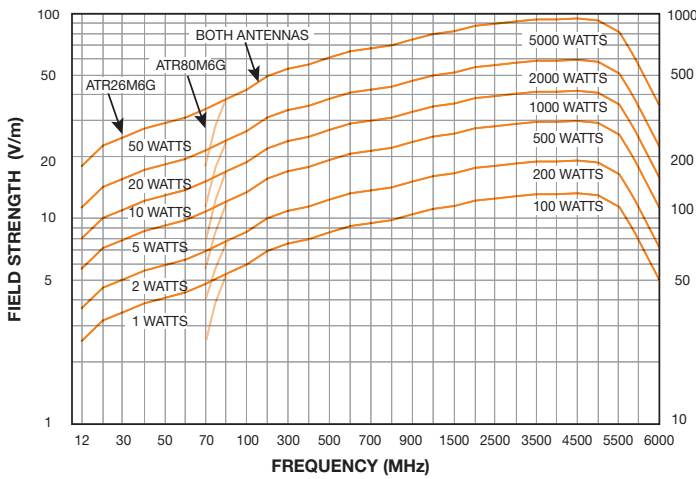
Shown on model AP5010B



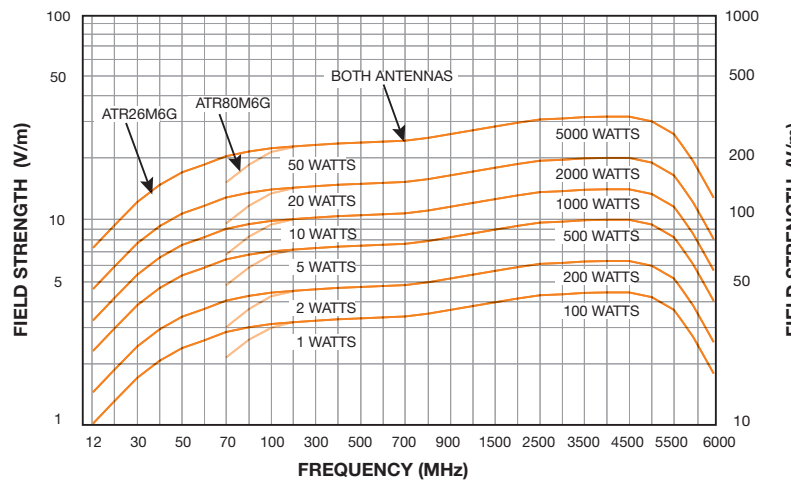
Shown on model AP5010B

ATR80M6G/ATR26M6G

ATR80M6G & ATR26M6G FIELD STRENGTH MEASURED AT 1 METER

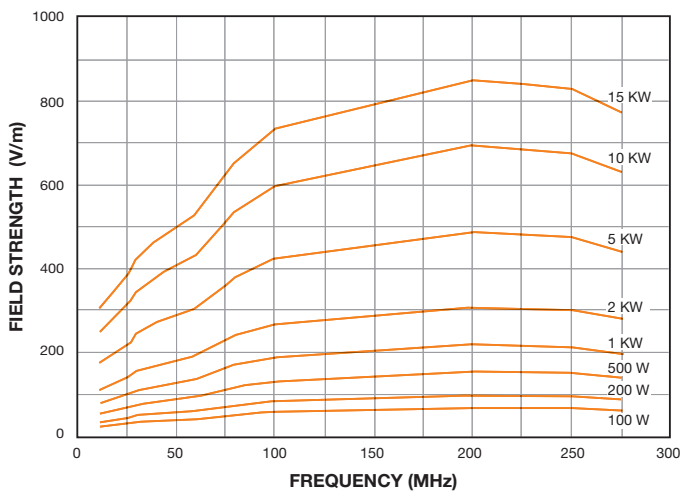


ATR80M6G & ATR26M6G FIELD STRENGTH MEASURED AT 3 METERS

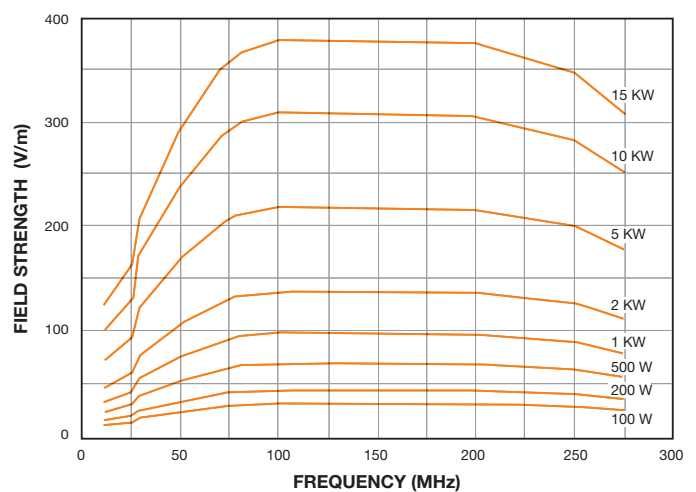


ATR26M250

ATR26M250 FIELD STRENGTH MEASURED AT 1 METER



ATR26M250 FIELD STRENGTH MEASURED AT 3 METERS



Field strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers and test systems conditions will influence performance. Field strength also varies with frequency and position of the antenna and EUT in non-anechoic testing environments.

Broadband Log-periodic. High Gain. Wide Band.

a: ATL80M1G

b: ATL150M1G

c: ATS700M11G

80 MHz to 10.5 GHz • To 800 V/m

You can count on AR's high gain log-periodics to deliver the constant high intensity fields you need for RFI and EMI testing, in and out of a shielded room. You'll also get frequency response and field intensity that goes beyond the norm.

Their lightweight, compact design makes relocation easy and they can easily be mounted on a flat surface or tripod. And these antennas are built tough to stand up to the outdoors.

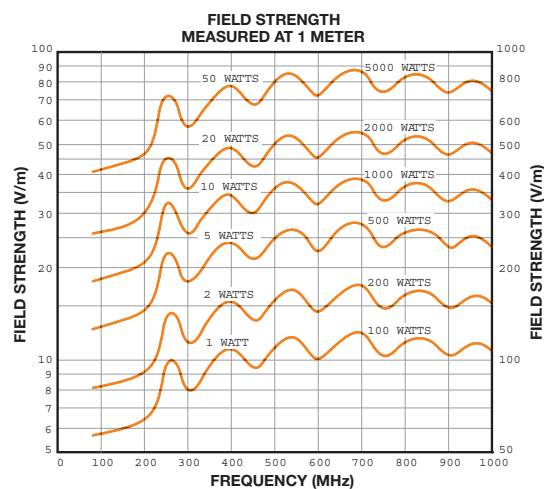
These antennas have been designed to allow polarization change without removing the antenna from a tripod. Both models can be calibrated for emissions testing.

The newest addition to our family of high gain, log periodic antennas, model ATS700M11G is a stacked, log periodic which provides a minimum gain of 6.5dB over isotropic and covers the 700 MHz – 10.5 GHz frequency range. Its excellent field uniformity and greater than 9dBi gain over 1-6 GHz making it ideal for the IEC-61000-4-3 standard. It is supplied with full calibration data, and can also perform emissions measurements.

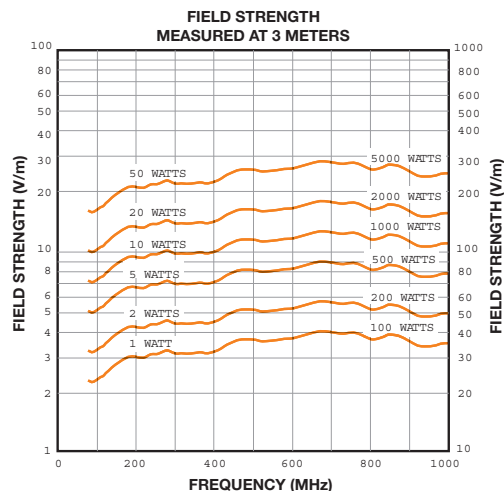


Shown on model TP1000B

ATL80M1G



Note: Curves above 1000 and 2000 watts do not apply past power-frequency limits of the antenna.



Specifications

	ATL80M1G	ATL150M1G	ATS700M11G
Frequency range	80 - 1,000 MHz	150 - 1,000 MHz	700 MHz - 10.5 GHz
Power input (max.)	2,000 watts	2,000 watts	300 watts
Power gain (over isotropic)	6.5 dBi min., 7.5 dBi avg.	6.5 dBi min., 7.5 dBi avg.	7 dBi min., 9.8 dBi avg.
Gain flatness	±1.0 dBi	±1.0 dBi	±1.0 dBi
Impedance	50 ohms nominal	50 ohms nominal	50 ohms nominal
VSWR	1.8:1 (max.) 1.5:1 (average)	1.8:1 (max.) 1.5:1 (average)	<1.5:1 (to 7 GHz) ≤2.8:1 (7 GHz to 10.5 GHz)
Beamwidth (average)	E plane 60° H plane 105°	E plane 60° H plane 105°	E plane 46° H plane 48°
Front to back ratio (min.)	15 dB	15 dB	15 dB
Connector	Type N (F) quick change connector; Type C (F) supplied for higher power applications	Type N (F) quick change connector; Type C (F) supplied for higher power applications	Type N precision
Size (W X H X D)	102 x 13 x 91 cm (40 x 5.1 x 36 in)	102 x 13 x 91 cm 40 x 5.1 x 36 in)	46 x 27 x 27 cm (18 x 10.6 x 10.6 in)
Weight (max.)	7 kg (15 lb)	7 kg (15 lb)	3.7 kg (8.14 lbs)
Mounting	Wall bracket included. May also be mounted using the optional TP1000B tripod.	Wall bracket included. May also be mounted using the optional TP1000B tripod.	May be tripod mounted with included tripod mount.

b:



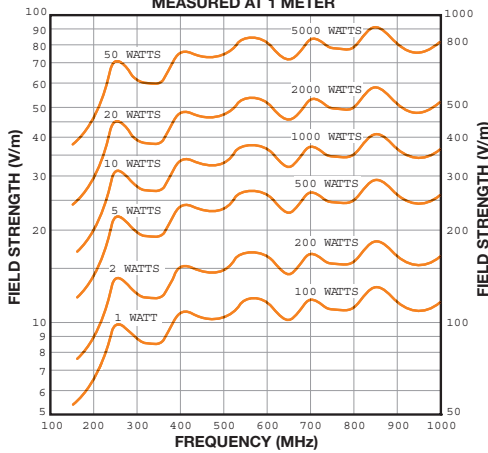
Shown on model TP1000B

c:



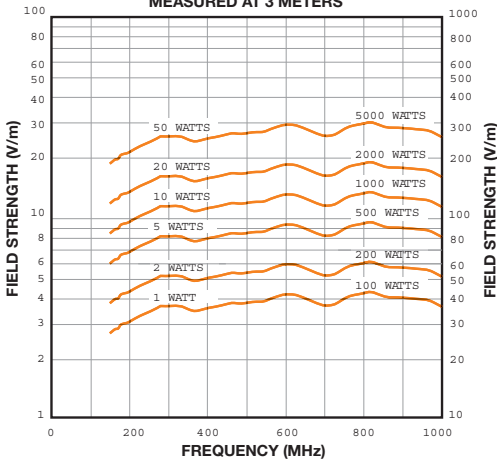
ATL150M1G

FIELD STRENGTH MEASURED AT 1 METER



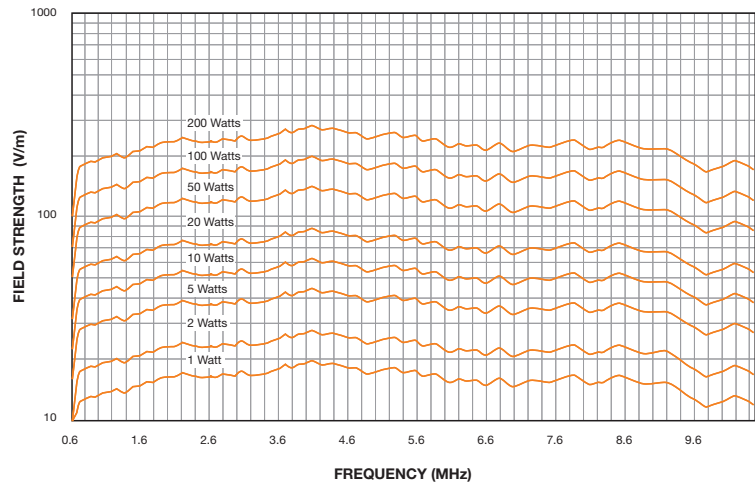
Note: Curves above 1000 and 2000 watts do not apply past power-frequency limits of the antenna.

FIELD STRENGTH MEASURED AT 3 METERS

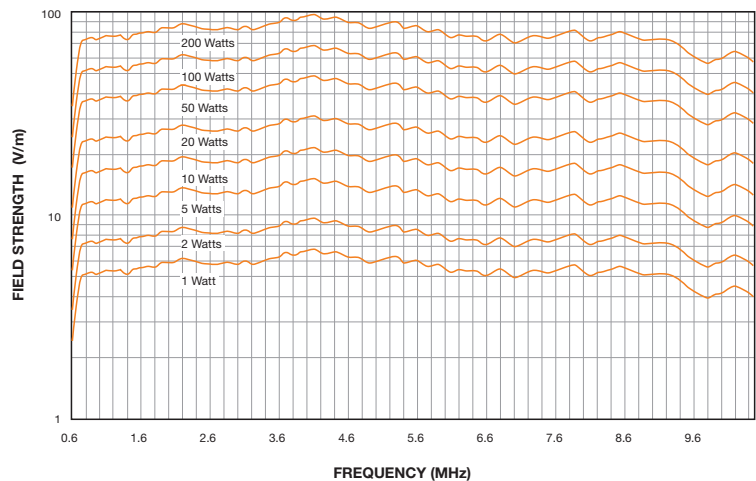


ATS700M11G

FIELD STRENGTH MEASURED AT 1 METER



FIELD STRENGTH MEASURED AT 3 METER



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 environments.

RF Horns. High Gain Over A Broad Spectrum.

a: ATH200M1G

b: ATH200M1G-1

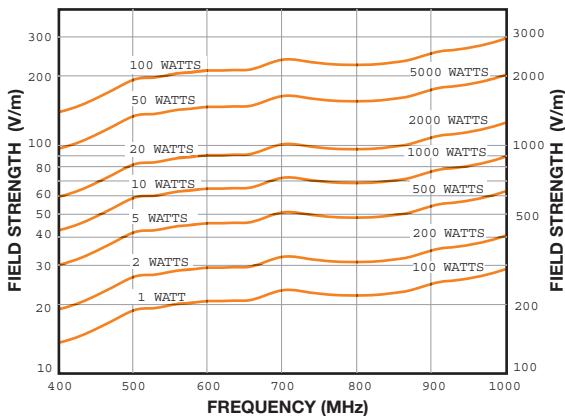
c: ATH400M1G

200 To 1,000 MHz • To 800 V/m

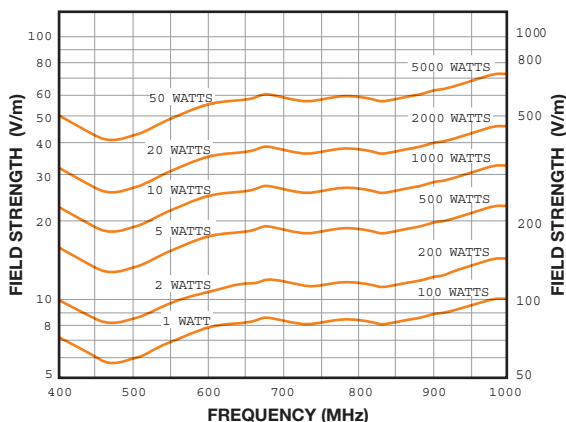
Our RF horn antennas exhibit increasing gain with frequency up to 18 dBi at 1,000 MHz, helping to compensate for losses that occur elsewhere in an RF test system. The ATH200M1G handles up to 5,000 watts input power and can be used with AR's high power amplifiers. You can use these antennas in shielded rooms or free space testing.

ATH400M1G

FIELD STRENGTH
MEASURED AT 1 METER



FIELD STRENGTH
MEASURED AT 3 METERS



Shown on model TP1000B

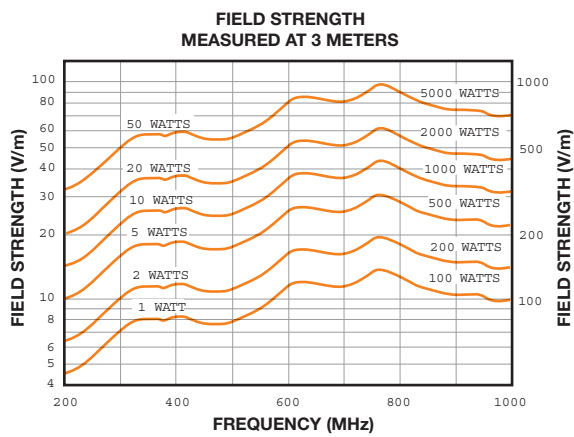
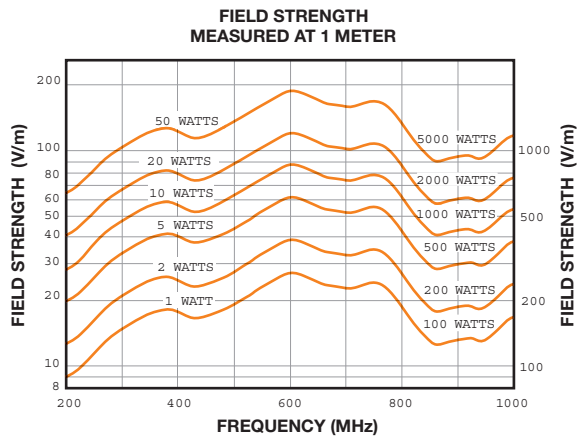
Specifications

	ATH200M1G	ATH200M1G-1	ATH400M1G
Frequency range	200 - 1,000 MHz	200 - 1,000 MHz	400 - 1,000 MHz
Power input (max.)	5,000 watts	10,000 watts	3,000 watts
Power gain (over isotropic)	10 dBi min., typically increasing to 18 dBi at 1,000 MHz	10 dBi min., typically increasing to 18 dBi at 1,000 MHz	10 dBi min., typically increasing to 15 dBi at 1,000 MHz
Impedance	50 ohms nominal	50 ohms nominal	50 ohms nominal
VSWR	2.5:1 max., 1.5:1 avg.	2.5:1 max., 1.5:1 avg.	2.5:1 max., 1.5:1 avg.
Beamwidth (front to back)	Typical curves available on request	Typical curves available on request	Typical curves available on request
Connector	Type 1- 5/8 EIA Flange, Quick Change Connector	Type 1- 5/8 EIA Flange	Type 1- 5/8 EIA Flange, Quick Change Connector
Mounting	Heavy-duty tripod included. Pads with 3/8-16 thread for stand mounting vertically or horizontally.	Heavy-duty tripod included. Pads with 3/8-16 thread for stand mounting vertically or horizontally.	Rear flange for wall mount. Pads with 1/4-20 thread for tripod mount.
Weight	46 kg (100 lb)	46 kg (100 lb)	9.1 kg (20 lb)
Size (W X H X D)	109.2 x 145.8 x 175.3 cm (43 x 57 x 69 in)	109.2 x 145.8 x 175.3 cm (43 x 57 x 69 in)	56.4 x 79.3 x 73.7 cm (22.2 x 31.2 x 29 in)

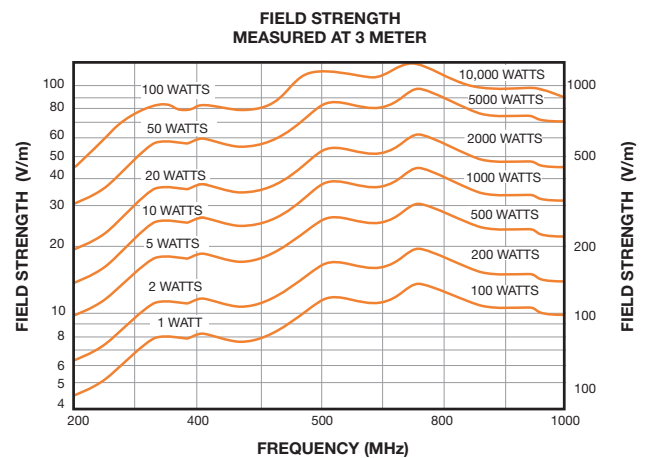
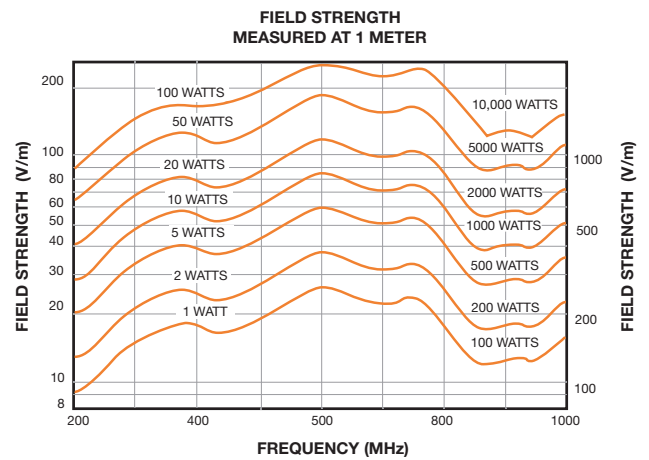
Field strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.



ATH200M1G



ATH200M1G-1



Suite of Antennas for DO 160 HIRF Testing



a:

b:

c:

Shown on model TP1000B

a: ATH2G4 - 2 to 4 GHz

b: ATH4G6 - 4 to 6 GHz

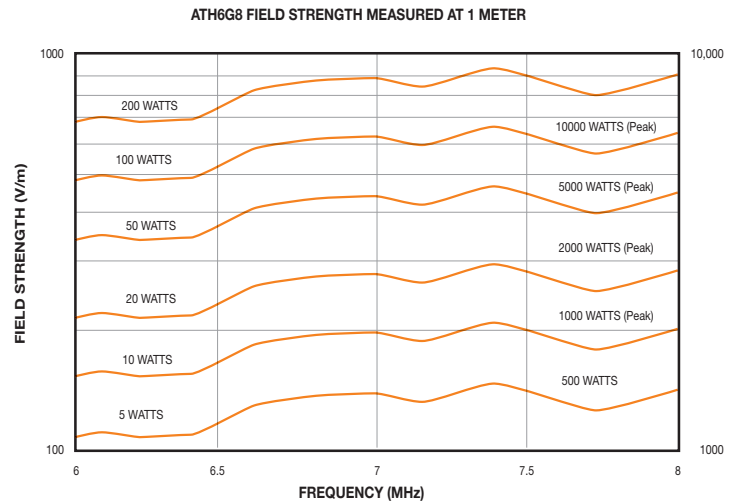
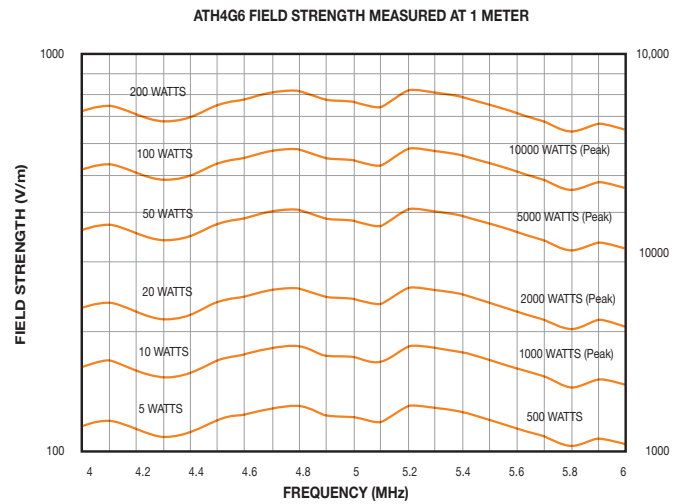
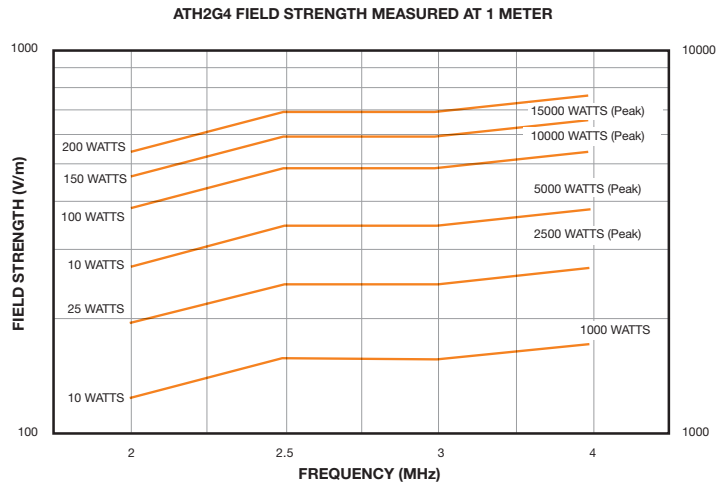
c: ATH6G8 - 6 to 8 GHz

A Special Family of Antennas for High Intensity Radiated Field (HIRF) Testing

High fields - whether from radar or other electronic devices, or generated by enemy/terrorist forces - can cause electronic equipment to malfunction, stop working, or worse. Our amplifiers and antennas are critical components in generating high intensity fields for testing electronic equipment. To keep up with the demands of HIRF testing, AR has developed a new family of antennas with the power and bandwidth needed for high field testing.

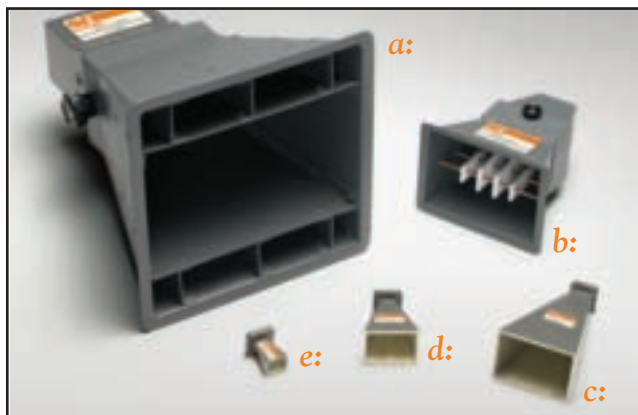
These are all high-gain, high-power microwave horn antennas that provide typical 20 dBi over isotropic. They supply high intensity fields for DO 160 HIRF testing. They are extremely compact and lightweight for easy mobility. Yet they're built tough to withstand the demands of outdoor use. All three antennas are designed to mount easily on a tripod or to a mounting plate; and can be used with AR's power-pulsed traveling wave tube amplifiers.

Specifications	ATH2G4	ATH4G6	ATH6G8
Frequency range	2 - 4 GHz	4 - 6 GHz	6 - 8 GHz
Power input (max.)	1,000 watts CW	800 watts CW	700 watts CW6 - 7.5 GHz 600 watts CW7.5 - 8 GHz
Peak Pulse less than 20%	17 kW Peak Pulse (1% duty cycle 6 s pulse width)	15 kW Peak Pulse (1% duty cycle 6 s pulse width)	10 kW Peak Pulse (1% duty cycle 6 s pulse width)
Power gain (over isotropic)	17 dBi min.	18 dBi typ.	18 dBi typ.
VSWR			
Maximum	1.5:1	1.5:1	1.5:1
Average	1.3:1	1.3:1	1.3:1
Beamwidth (avg.)			
E Plane	18°	19°	19°
H Plane	16°	19°	19°
Connector	7-16 DIN connector	7-16 DIN connector	7-16 DIN connector
Weight	11.36 kg (25 lb)	1.59 kg (3.5 lb)	91 kg (2 lb)
Size (WxDxH)	46.55 x 29.4 x 98.50 cm (19 x 12 x 40.2 in)	23.11 x 17.01 x 46.99 cm (9.1 x 6.7 x 18.5 in)	16.25 x 12.06 x 39.37 cm (6.4 x 4.75 x 15.5 in)
Mounting	Mounting pad on the E-plane and H-plane for tripod	Mounting pad on the E-plane and H-plane for tripod	Mounting pad on the E-plane and H-plane for tripod



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 environments.

Compact, Lightweight Microwave Horns To 50 GHz.



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 environments.

Even our microwave horns provide exceptional performance. Along with our broadband RF antennas, our microwave horns are specially designed to compensate for the losses that typically occur in test systems as frequency increases.

These innovative microwave horn antennas are compact and lightweight for easy mobility, yet they're tough enough for the extra demands of outdoor use, and they easily mount on a tripod. Several of our microwave horns have removable gain enhancers that improve the field strength to perform 3-meter testing.

a: ATH4G8

b: ATH7G18

c: ATH18G27

d: ATH18G27-1

e: ATH26G40

Specifications	ATH800M5GA	ATH2G10	ATH2G8	ATH4G8	ATH7G18
Frequency range	800 MHz - 5 GHz	2 - 10 GHz	2.5 - 7.5 GHz	4 - 8 GHz	7.5 - 18 GHz
Power input (max.) Peak power input (mxz)	1,500 watts 15 kW peak pulse (1% duty cycle 6 s pulse width)	700 watts	2,800 watts	500 watts	2,800 watts
Power gain (over isotropic)	11 dBi min, increasing to 21 dBi at 5 GHz	12.5 dBi min., increasing to 23 dBi at 10 GHz	9.5 dBi min, increasing to 18 dBi at 7.5 GHz.	11.5 dBi min., increasing to 15.9 dBi at 8 GHz	11.3 dBi min., increasing to 14 dBi at 18 GHz
Impedance	50 ohms nominal	50 ohms nominal	50 ohms nominal	50 ohms nominal	50 ohms nominal
VSWR					
Maximum	2.5:1	2:1	1.5:1	1.6:1	1.2:1
Average	1.6:1	1.5:1	1.3:1	1.3:1	1.1:1
Beamwidth (avg.) at 3dBi down from peak					
E Plane	27.5°	25°	30°	18° with gain enhancer	17° with gain enhancer
H Plane	25°	27°	30°	18° with gain enhancer	17° with gain enhancer
Connector	7-16 DIN (F), Type N(F) Quick change connector	N(F)	WRD-250-D30	N (F) Quick change connector	WRD-750 waveguide
Weight	7.26 kg (16 lb)	1.59 kg (3.5 lb)	0.6 kg (1.3 lb)	2.27 kg (5 lb)	0.6 kg (1.25 lb)
Size (WxDxH)	46.3 x 46.3 x 69.2 cm (18.25 x 18.25 x 27.25 in)	22.9 x 17.8 x 31.75 cm (9 x 7 x 12.5 in)	14 x 10.4 x 13.2 cm (5.5 x 4.1 x 5.2 in)	without gain enhancer 7.62 x 10.3 x 15.14 cm 3.00 x 4.06 x 5.96 in with gain enhancer: 21.6 x 21.6 x 30.5 cm (8.5 x 8.5 x 12 in)	without gain enhancer 4.6 x 6.1 x 6.4 cm (1.8 x 2.4 x 2.5 in) with gain enhancer: 8.9 x 11.4 x 13.3 cm (3.5 x 4.5 x 5.25 in)



Model ATH1G18

Specifications

	ATH200M2G	ATH1G18
Frequency range	200 MHz - 2 GHz	1-18 GHz
Power input (max.)	1,000 watts	300 watts up to 7 GHz; above 7 GHz, derate linearly to 175 watts at 18 GHz
Power gain (over isotropic)	6 dBi typ.	6 dBi min.
Impedance	50 ohms nominal	50 ohms nominal
VSWR (typ.)	2:1	2:1
Beamwidth (avg.)		
E Plane	(beamwidth graph available on request)	(beamwidth graph available on request)
H Plane		
Front To Back Ratio (Min.)	20 dBi	20 dBi
Connector	N (F) Precision	N (F) Precision
Weight	10.21 kg (22.5 lb)	1.57 kg (3.45 lb)
Size (WxDxH)	72.9 x 97.8 x 93.2 cm (28.7 x 38.5 x 36.7 in)	24.1 x 16 x 20.4 cm (9.48 x 6.29 x 8.03 in)

AR offers two wideband, high gain microwave horn antennas for RFI/EMI testing. Due to the wide beamwidth, these two antennas are compliant to many military and commercial emissions standards. Both horns are compact and lightweight for easy mobility, yet are tough to withstand the extra demands of outdoor use.

ATH18G27

18 - 26.5 GHz
350 watts

18.7 dBi min,
increasing to 21.6 dBi
at 26.5 GHz.

50 ohms nominal

1.5:1
1.3:1

15°
15°
WR-42 waveguide

56.7 g (2 oz)
5.74 x 4.09 x 11.4 cm
(2.26 x 1.61 x 4.49 in)

ATH18G27-1

18 - 26.5 GHz
350 watts

8.8 dBi min,
increasing to 12 dBi
at 26.5 GHz.

50 ohms nominal

1.5:1
1.3:1

55°
56°
WR-42 waveguide

57 g (2 oz)
1.63 x 1.32 x 2.92 cm
(0.64 x 0.52 x 1.15 in)

ATH18G40

18 - 40 GHz
450 watts
2,000 watts peak pulse

15.5 dBi min,
increasing to 21.2 dBi
at 40 GHz.

50 ohms nominal

1.5:1
1.3:1

21°
19°
WR-180 C24 waveguide

56.7 g (2 oz)
3.73 x 2.69 x 6.27 cm
(1.47 x 1.06 x 2.47 in)

ATH26G40

26.5 - 40 GHz
240 watts

18.9 dBi min,
increasing to 21.8 dBi
at 40 GHz.

50 ohms nominal

1.5:1
1.3:1

15°
15°
WR-28 waveguide

56.7 g (2 oz)
4.06 x 3.07 x 7.67 cm
(1.6 x 1.21 x 3.02 in)

ATH26G40-1

26.5 - 40 GHz
240 watts

8.6 dBi min,
increasing to 12.1 dBi
at 40 GHz.

50 ohms nominal

1.5:1
1.3:1

57.5°
56.5°
WR-28 waveguide

57 g (2 oz)
1.09 x 0.89 x 1.27 cm
(0.43 x 0.35 x 0.5 in)

ATH33G50

33 - 50 GHz
240 watts
2,000 watts peak

20 ± 2dBi

50 ohms nominal

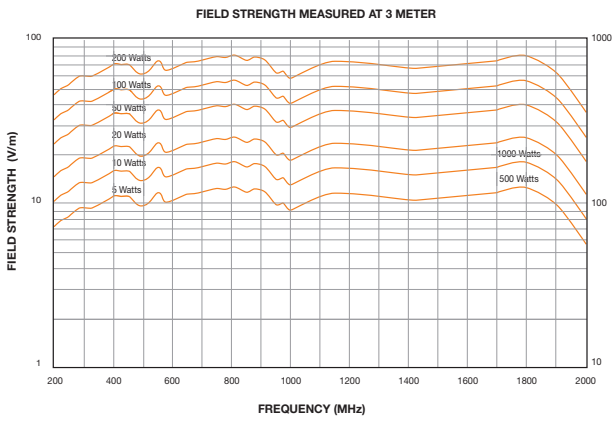
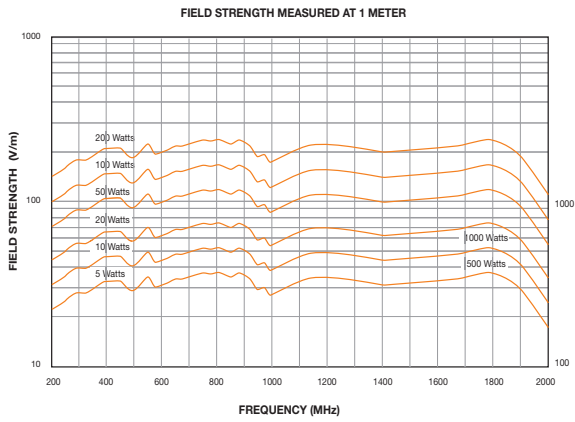
1.2:1

9.85°
11.9°
WR-22 waveguide

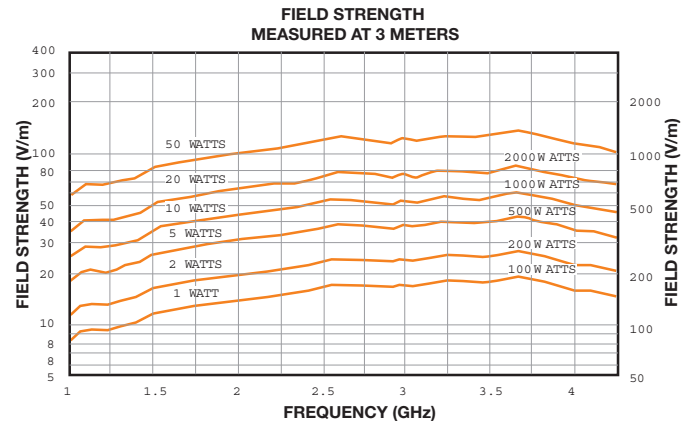
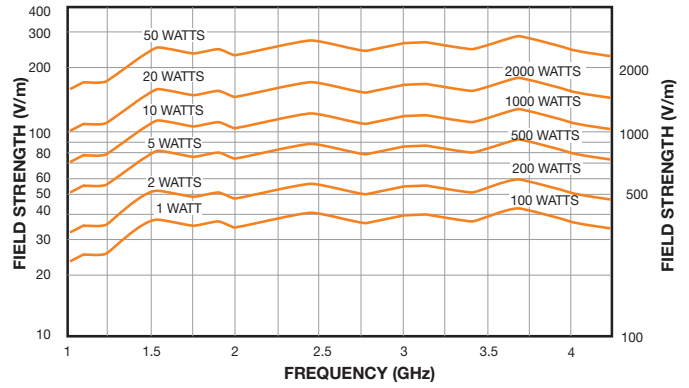
0.15 kg (0.33 lb)
4 x 3 x 9 cm
(1.57 x 1.18 x 3.54 in)

Microwave Horns. Now To 50 GHz.

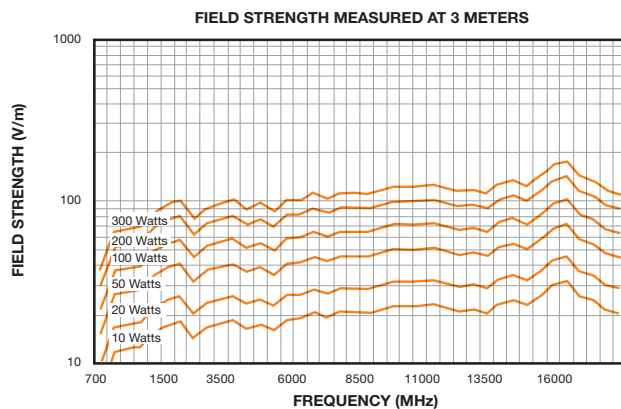
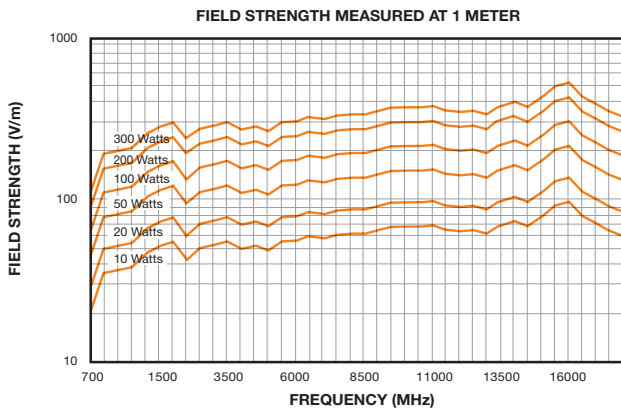
ATH200M2G



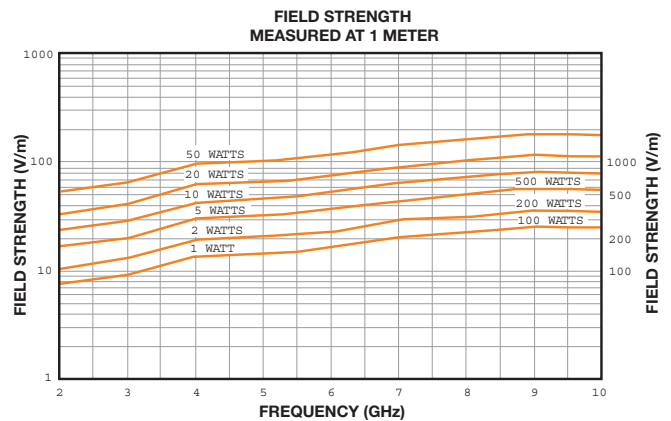
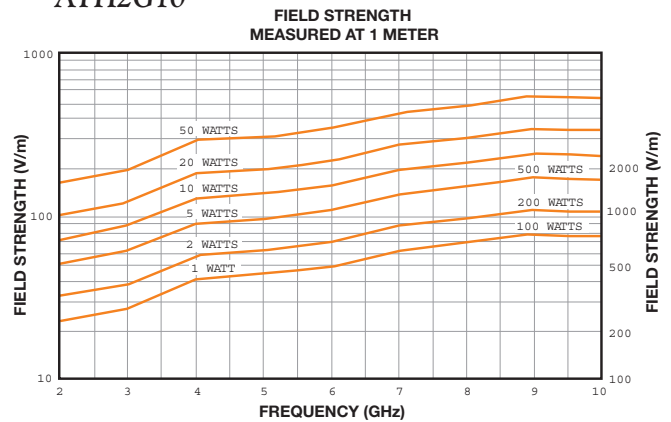
ATH800M5GA



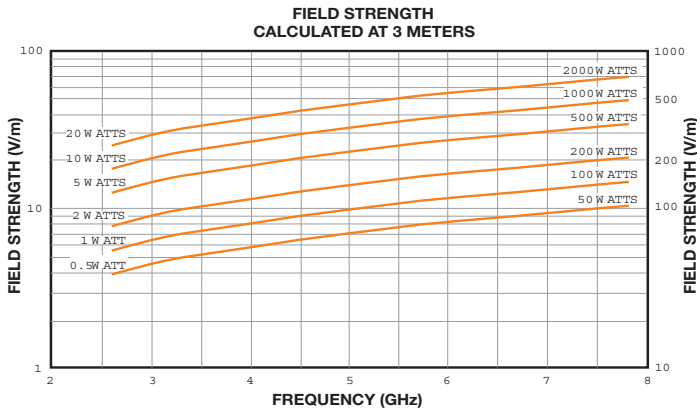
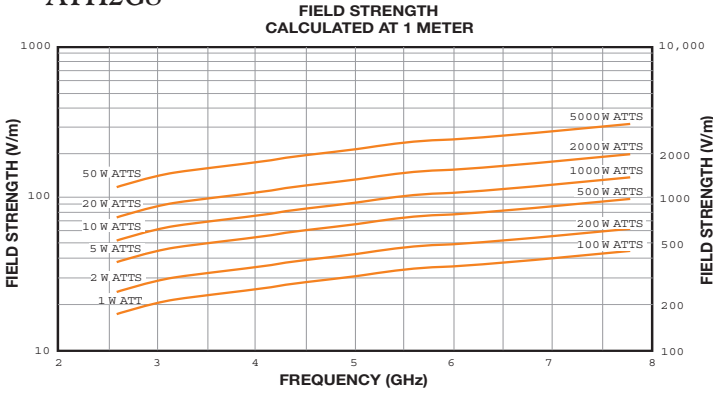
ATH1G18



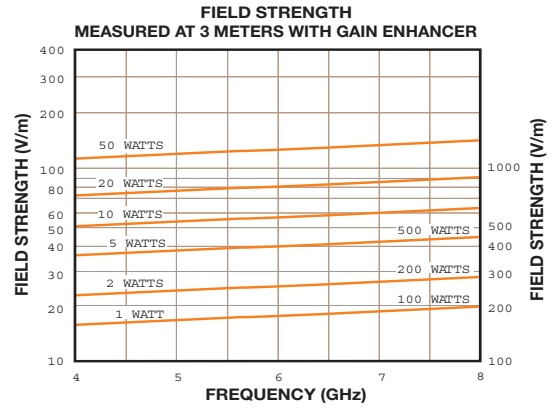
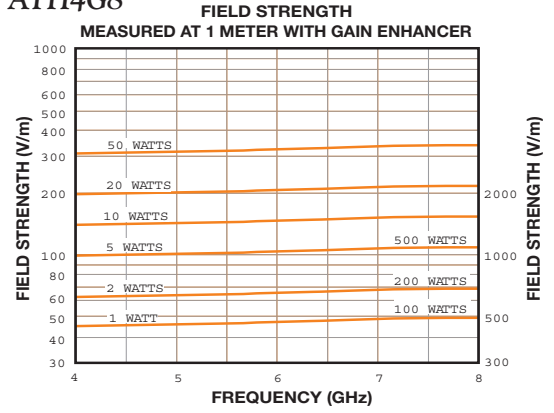
ATH2G10



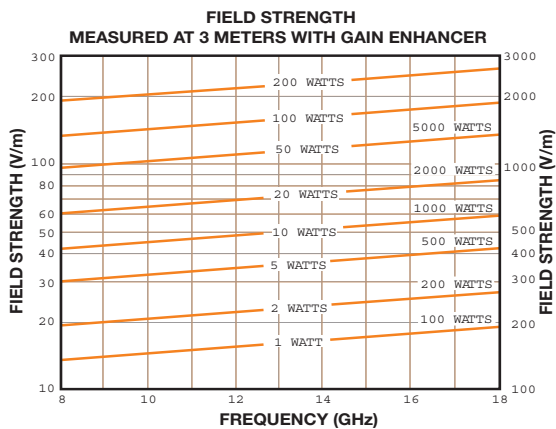
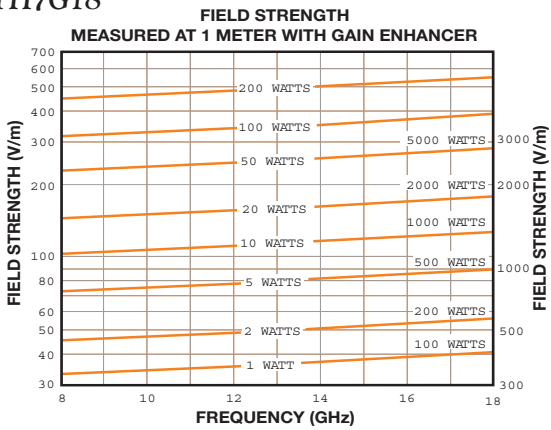
ATH2G8



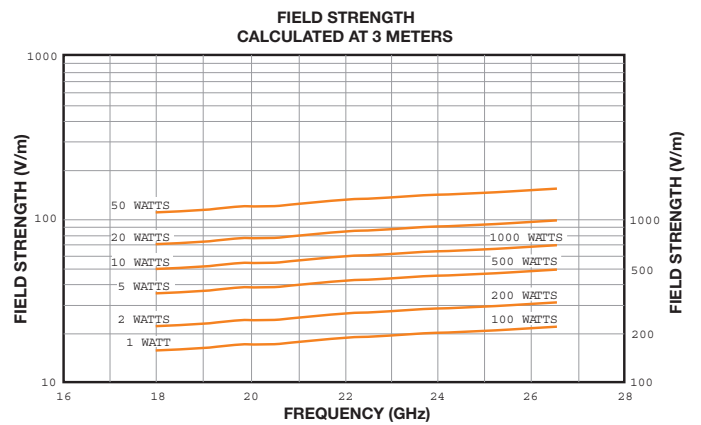
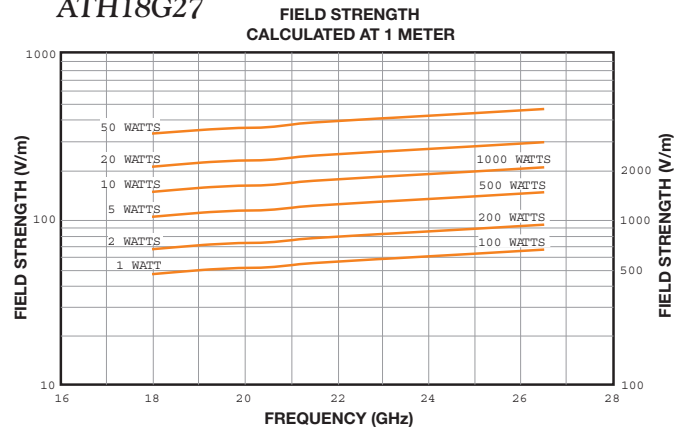
ATH4G8



ATH7G18



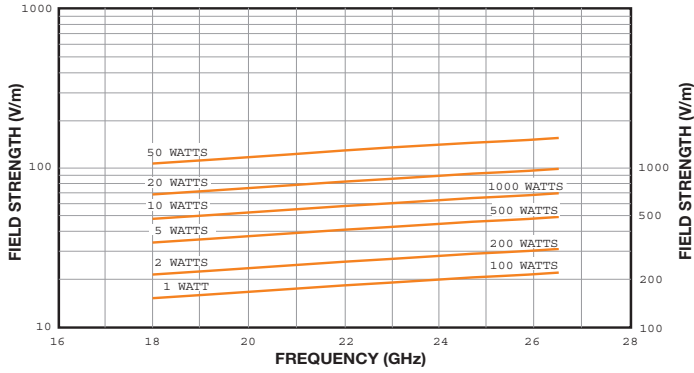
ATH18G27



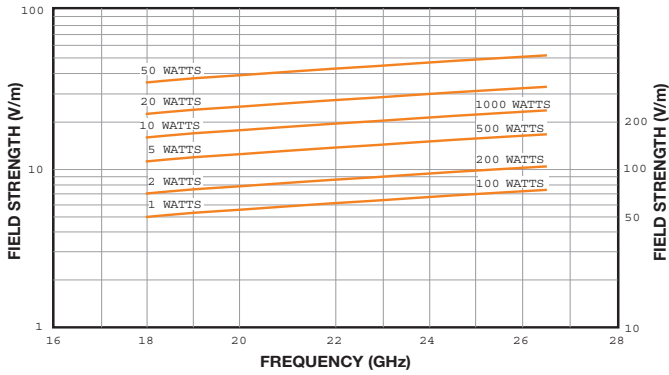
Microwave Horns. Now To 50 GHz.

ATH18G27-1

FIELD STRENGTH
CALCULATED AT 1 METER

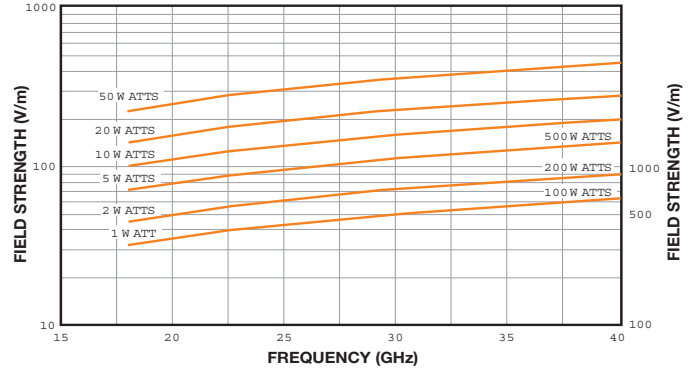


FIELD STRENGTH
CALCULATED AT 3 METERS

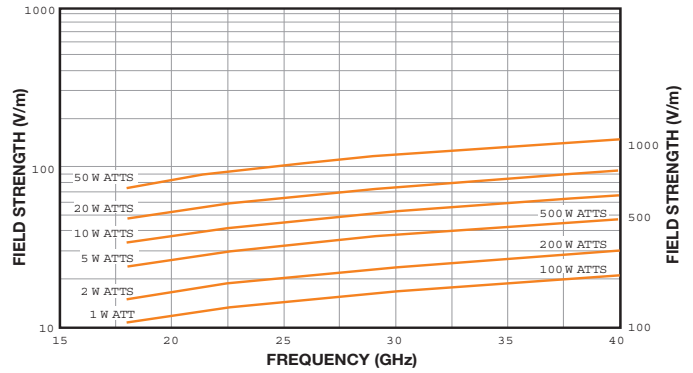


ATH18G40

FIELD STRENGTH
CALCULATED AT 1 METER

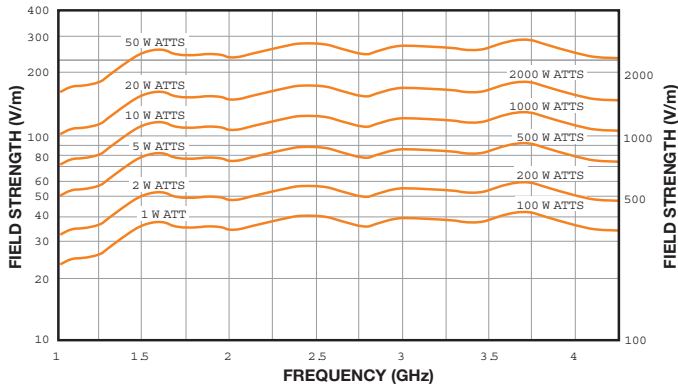


FIELD STRENGTH
CALCULATED AT 3 METERS

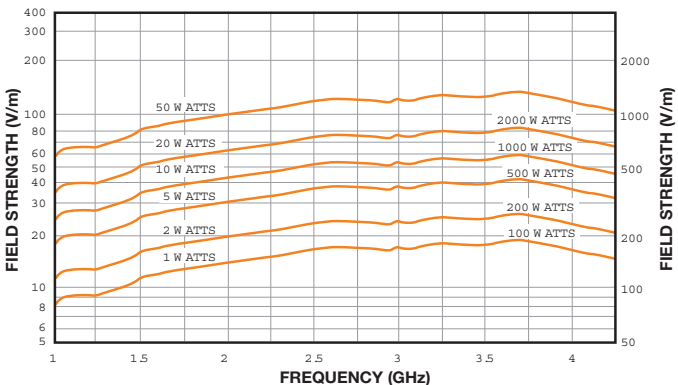


ATH26G40

FIELD STRENGTH
CALCULATED AT 1 METER

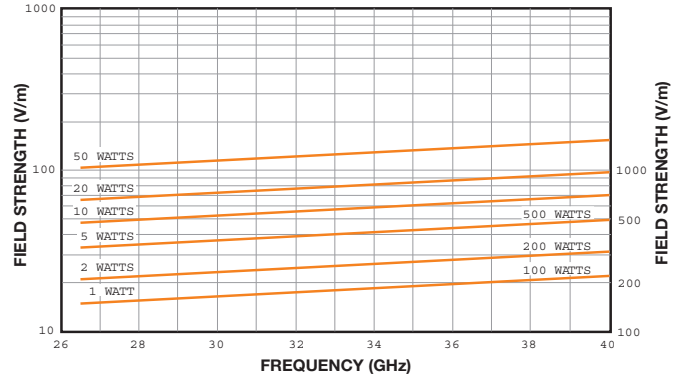


FIELD STRENGTH
CALCULATED AT 1 METER

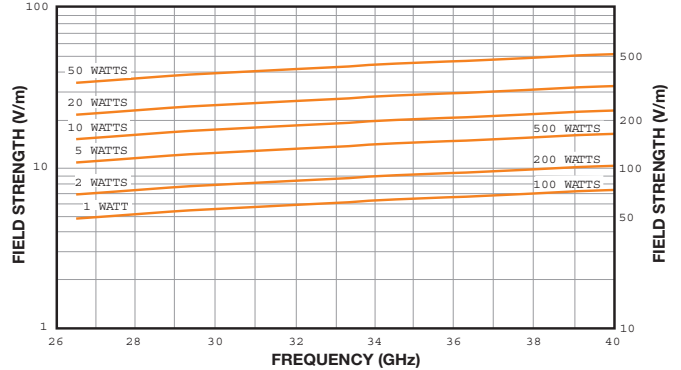


ATH26G40-1

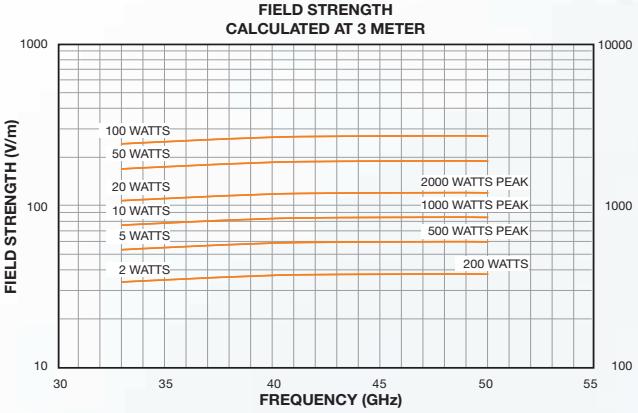
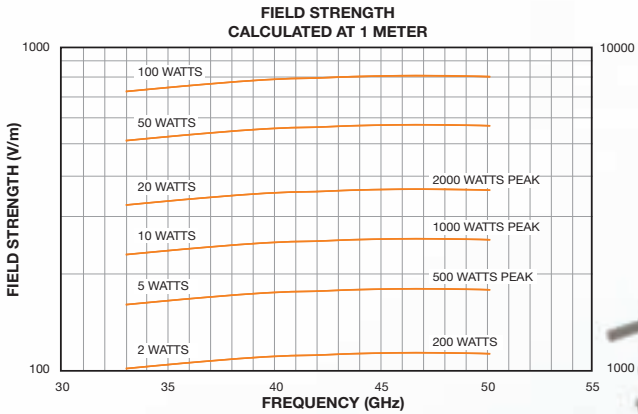
FIELD STRENGTH
CALCULATED AT 1 METER



FIELD STRENGTH
CALCULATED AT 3 METERS



ATH33G50

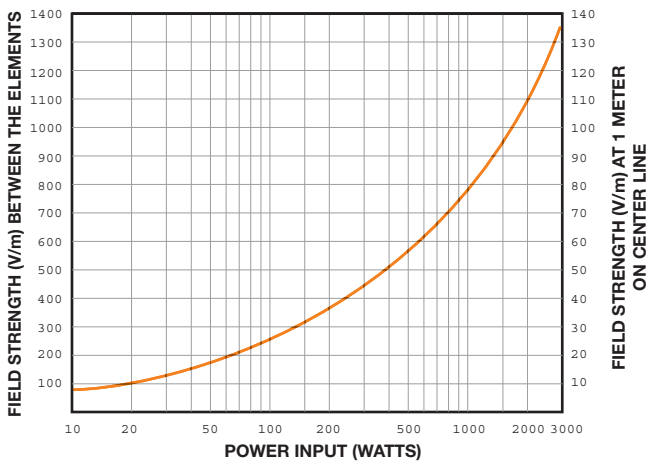


E-Field Generators. For Uniformity Between The

ATE10K30M Our Original Wideband.

10 kHz to 30 MHz • 1,000 V/m Between the Elements

The ATE10K30M E-field radiator uses low inductance, high-power internal load resistors to terminate RF power, and offers well-matched input VSWR. An internal broadband transformer helps increase output voltage. With optional forced-air cooling, the ATE10K30M can handle power levels up to 3,000 watts. It is small enough to easily handle in shielded rooms and suitable for susceptibility testing at high field levels.



Field strength is shown using AR broadband power amplifiers. Field strengths are typical and do not include cable losses. Individual shielded rooms, reflections, amplifiers, and test-system characteristics will influence performance.

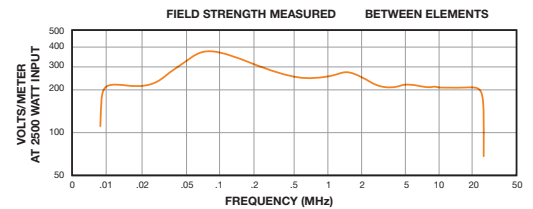
ATE10K30M-1 For The BIG Jobs

10 kHz to 30 MHz • To 200 V/m Between the Elements

Practically no job is too large for the ATE10K30M-1 broadband high power E-field generator. It wraps around cars, small trucks, and other large EUTs. Unbolt the bottom elements from the field generator base to use the ATE10K30M-1 above a ground plane or turn table.



Its high input power and low VSWR capability means the ATE10K30M-1 generates high E-field strengths for the large span between the elements.



Specifications

OPERATING RANGE (max.)

POWER (watts)	Without forced-air cooling		With forced-air cooling	
	DUTY CYCLE (percent)	ON TIME (minutes)	DUTY CYCLE (percent)	ON TIME (minutes)
1000	100	continuous	100	continuous
1600	50	7	100	continuous
2000	25	3	100	continuous
3000	Do not use 50		5	

Frequency range 10 kHz - 30 MHz
 Impedance 50 ohms
 VSWR 2.5:1 max.
 Electric field intensity Up to 1000 volts/meter, see graph
 Connector Type C (F) Quick change connector (other connectors available - contact factory)
 Size (W X H X D) 188 x 72 x 7 cm (74 x 28.3 x 2.8 in)
 Weight (max.) 16 kg (35 lbs)
 Mounting Optional tripod available

Specifications

Power input (max)
 Frequency range
 Input Impedance
 Electric field intensity (at 2,500 watt input)
 Connector*
 Cooling
 Weight (Approx.)
 Size (W x H x D)

*Adapter C (M)/ N(F) included.



ATE10K100M Evolved Design.

10 kHz to 100 MHz • To 300 V/m
Between the Elements

Our engineers improved upon the folded dipole design with this patented extended bandwidth E-field generator. It offers excellent spatial and spectral field uniformity within the defined test zone.

Two sets of elements accommodate a range of EUT sizes. They can be changed quickly and easily, thanks to the specially designed quick-disconnect clamps.

Type A elements provide the highest field intensities and can test objects up to 36 x 46 x 36 cm. The larger elements, Type B, are suitable for testing objects up to 48 x 46 x 36 cm.

Field strength is shown using AR broadband power amplifiers. Field strengths are typical and do not include cable losses. Individual shielded rooms, reflections, amplifiers, and test-system characteristics will influence performance.

3,000 watts CW
10 kHz - 30 MHz
50 ohms, VSWR 2.5:1 max., 1.5:1 avg.
200 volts/meter minimum between elements
Type C (F)
Natural convection to 40°C ambient
113 kg (250 lb)
101.8 x 222.25 x 303.53 cm (40 x 87.50 x 119.5 in)

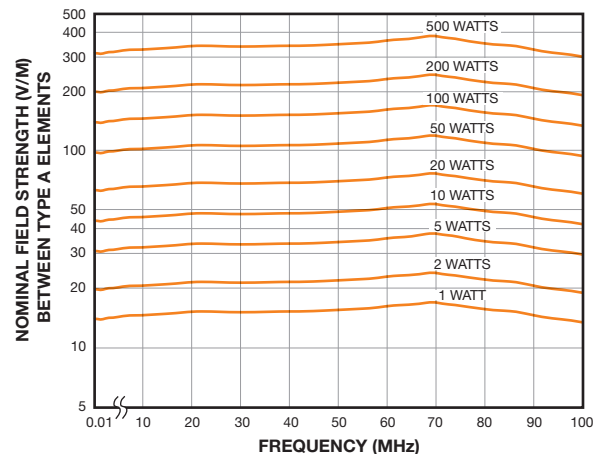
Specifications

Frequency range	10 kHz - 100 MHz
Input Impedance	50 ohms nominal
VSWR	2.5:1 max., 1.4:1 typical
Power input	500 watts max.
Electric field intensity	see graphs
Field Intensity	
between Type A elements	nominally 350 V/m with 500 W input
between Type B elements	nominally 200 V/m with 500 W input
Maximum Test Object Volume	
between Type A elements	36 x 46 x 36 cm (14 x 18 x 14 in)
between Type B elements	48 x 46 x 36 cm (19 x 18 x 14 in)
Connector*	Type N (F)
Size	
with Type A elements	74 x 41 x 102 cm (29 x 16 x 40 in)
with Type B elements	104 x 41 x 102 cm (41 x 16 x 40 in)
Weight (max.)	13 kg (28 lb)
Mounting	Accepts tripod threaded 1/4 x 20 stud on three faces (optional tripod available)

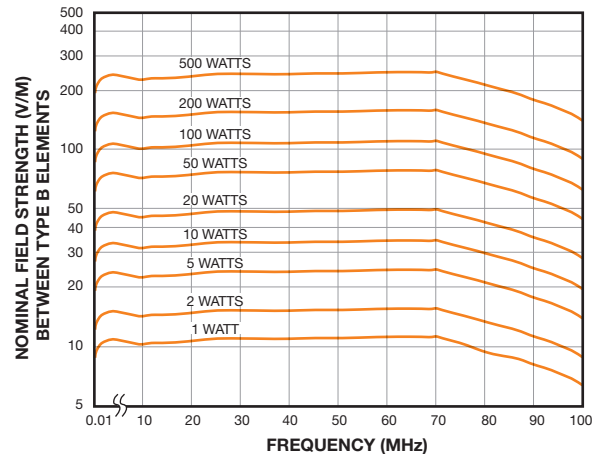
*Adapter C (M)/ N(F) included.



FIELD STRENGTH MEASURED BETWEEN TYPE A ELEMENTS



FIELD STRENGTH MEASURED BETWEEN TYPE B ELEMENTS



Field strength is shown using AR broadband power amplifiers. Field strengths are typical and do not include cable losses. Individual shielded rooms, reflections, amplifiers, and test-system characteristics will influence performance.

Free Space Fields From A Broadband Transmission



ATP10K100MM3

ATP10K100MM3

10 kHz to 100 MHz • To 500 V/m

360° Rotation Accommodates Any Test Object.

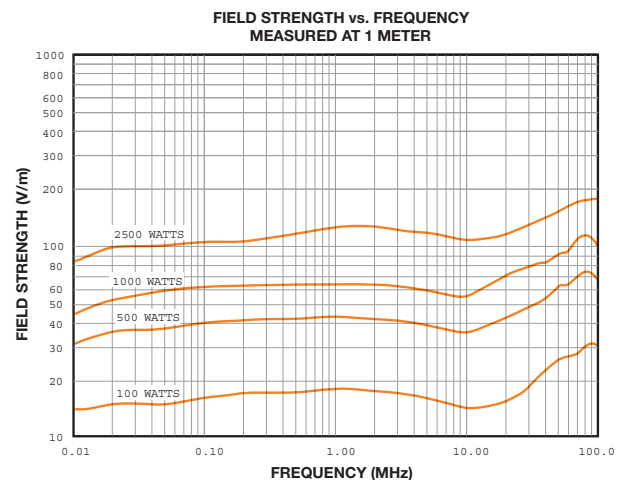
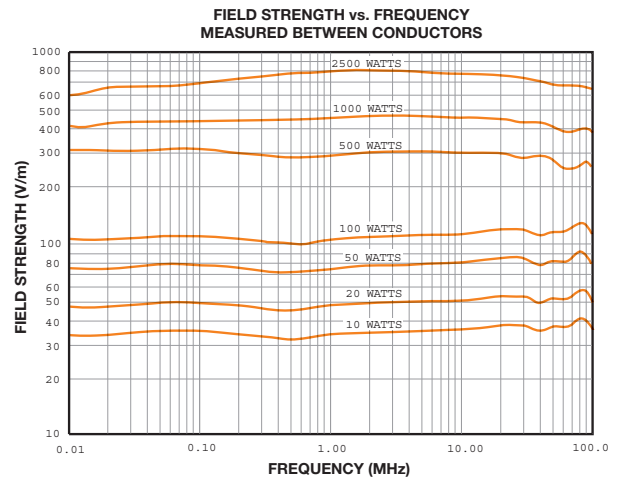
The ATP10K100MM3 adds new possibilities to shielded room and anechoic chamber testing with its ability to match free space impedance resulting in efficient production of RF fields.

The parallel transmission line of the ATP10K100MM3 offers a 377-ohm wave impedance of free space. Matching transformer and load resistors are built in and provide excellent VSWR characteristics over a frequency range of 10 kHz to 100 MHz.

The open area between conductors accommodates entire assemblies within the maximum field volume. Test items too large for insertion between the elements can be brought near the parallel conductors and radiated. The ATP10K100MM3 easily rotates to any horizontal, vertical or diagonal position, and is equipped with height adjustment. Rotation accommodates large EUTs that can't fit between conductors.



ATP10K100M includes a stand with casters for easy mobility



Field strength is shown using AR broadband power amplifiers. Field strengths are typical and do not include cable losses. Individual shielded rooms, reflections, amplifiers, and test-system characteristics will influence performance.

Specifications	
Power input (max).	3,000 watts CW
Frequency range.	10 kHz - 100 MHz
Input impedance	50 ohms
VSWR	2.0:1 max. 10 kHz - 100 MHz 6:1 max. 10 - 20 kHz above 1kW input power
Electric field intensity	See charts above
Connector	Type C(F), Type N (F) Quick change connector
Cooling	Natural convection to 40°C ambient temperature
Weight	159 kg (350 lb)
Size (W x H x D)	261.1 x 215.4 x 141.7 cm (102.8 x 84.8 x 55.8 in)

Antenna Positioner & Tripods



The AP5010B Antenna Positioner.

Heavy-duty non-conductive support and positioner for models ATR26M6G, ATR26M6G-1 or ATR26M250. Built-in casters for easy movement in a shielded room or open site testing. The design also allows the test engineer to position the antenna for either vertical or horizontal polarization; as well as permitting the antenna to be tilted 30 degrees height adjustment is from 1.91m (72.25 in) to 3.16m (124.50 in). The AP5010B is equipped with base leg adjustment is from 1.53m (60.19 in) overall to 2.04m (80.19 in).



The TP1000B tripod.

Our lightweight, nonconductive tripod supports many antennas. Angle, level and height are easily adjustable. The adjustable mount makes it simple to change antenna polarization. The TP1000BMI comes with locking casters and an additional swivel adapter head. AR offers other tripods including models TP2000, TP2010 and TP4000. For more information on these models, visit our website.



The TM Series Antenna Adapters.

AR also provides antenna adapters that allow bore sight rotation of microwave horn antennas. The TM series is compatible with AR Model TP1000B tripod.

TM1000: For WRD-750 D24 waveguide and ATH7G18.

TM1001: For WRD-42 waveguide and ATH18G27 and ATH18G27-1

TM1002: For WR-28 waveguide and ATH26G40 and ATH6G40-1.

TM1004: For WRD-250 D30 waveguide and ATH2G8



AP4000

The AP4000 Antenna positioner is a heavy-duty positioner for AR's ATH200M1G, 200 to 1,000 MHz high-gain horn antenna. The height is easily adjustable and it rotates to change polarization. The AP4000 is built on wheels for easy movement in a shielded room or at free space testing. Also available is a 3-meter height positioner for the ATH200M1G antenna.

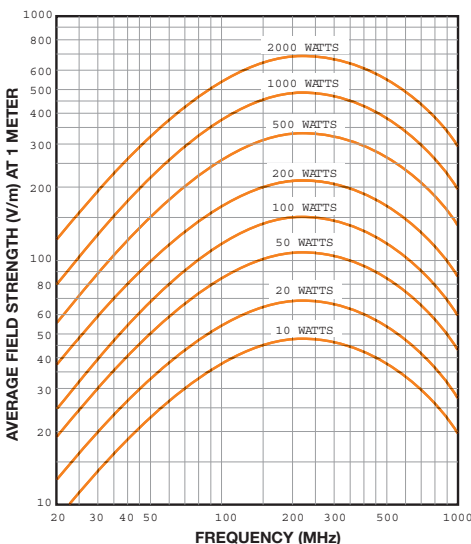
Shielded Room Antenna



The CAVITENNA : ATC25M1G 25 MHz to 1,000 MHz • To 700 V/m

This is the first RF antenna to make the shielded room an integral part of the radiator. A top-loaded monopole, the Cavitenna, model ATC25M1G, uses the shielded room as a reverberating antenna, and the wall as the antenna's ground plane. As a result, it accommodates extremely high power and corresponding field intensities, comparable to those of log-periodic antennas four times the size of the Cavitenna.

The Cavitenna is often used in fully automated test configurations. In a mode turned or mode stirred reverberation chamber, the Cavitenna can be used very effectively for lower frequencies, as it can be mounted on a wall and not protrude into the test volume as other antenna technologies will, such as the log-periodic and Biconical antennas may. The Cavitenna's compact design and high efficiency can even allow some reverberation chambers to extend the lower frequency down. The included magnetic clamp mounting simplifies installation in the shielded room.



Specifications	
Frequency range	25 - 1,000 MHz
Input power (max.)	
25 - 250 MHz	3,500 watts
250 - 500 MHz	2,000 watts
500 - 1000 MHz	1,250 watts
Impedance	50 ohms nominal
Connector	Type C (F)
Electric field intensity	See curves above
Size (W x H x D)	117 x 61 x 51 cm (46 x 24 x 20 in)
Weight (max.)	14 kg (30 lb)
Mounting provisions	Magnetic clamps included

Average field strengths using AR broadband power amplifiers are shown. Field strengths will vary with individual shielded room geometry and placement of the Cavitenna and test item within the room. Consult AR applications engineering or request our Cavitenna Test Report for more information.