

Base Station Antennas



COMPROD
Simplifying RF Solutions

Tel: US 1.877.825.2007 / CAN 1.800.603.1454

Email: salescomprodcom.com

Fax: 1.800.554.1033

www.comprodcom.com

Renowned for their superior performance, quality and reliability, our antennas are designed to excel in the most hostile environments.

Manufactured with the highest quality electrical and mechanical components, built with precision and strength, they feature sealed cable connections, crimped and soldered connectors, moisture-resistant wire harnesses and welded junctions which make them ideally suited for Mission-Critical applications.

Our technical sales and support staff will be pleased to help you select the right product for your application from our broad variety of market-proven products. Our antennas can also be tailored to fit specific needs, based on unique RF network or product applications (e.g.: increased mast height for higher elevation mounting, customized mast separated into two sections for easier handling inside elevators, etc.).

This catalog summarizes our most popular designs, documenting their electrical and mechanical specifications, images and RF propagation patterns: Data files for these antenna patterns can also be downloaded from our website in multiple formats, or on demand from our support team in any of the other popular data formats suitable for your network planning software.

KEY FEATURES AND OPTIONS:

1. Heavy-duty – Higher strength, designed to perform in high wind load, or unique situations where stronger designs are warranted.
2. Welded Design – All mechanical junctions are welded where possible to increase loading strength. This is ideal for high winds and winter conditions.
3. Black Anodized – A chemical-conversion coating ("Black Anodization") that is incorporated throughout the antenna assembly, colored black to absorb the sun's radiation to promote de-icing of the antenna. The anodization process results in enhanced protection against corrosive elements such as salty air, high humidity, and other corrosive environments (e.g. mining or petrochemical sites). The electrical performance and product life of the antenna is extended with this option.
4. Cable Lengths – Standard length of 2 feet. The feed line length can be adapted to your needs (up to 125 ft.).
5. Connectors – Type N is our standard connector, alternates can be ordered per requirements (e.g. SMA, TNC, DIN 7/16, etc.).
6. Custom Mounting Configurations can be offered depending on the style of antenna.
7. Custom Antennas – different frequency elements on single masts, different patterns (offset, opposing); dual assembly antennas, etc. Our Solutions Specialists can work to adapt a standard design to your unique coverage or installation requirements.



BASE STATION ANTENNAS

Model	Other	118-138	138-174	406-512	746-960	BW* 1.5:1	Type	Pattern	Gain dBd	Watts
265-70		•	•			6%	Ground Plane	Omni	1	300
266-70		•	•			1%	Ground Plane	Omni	2-3	250
267-70		118- 136				15%	Ground Plane	Omni	1	250
268-70				406-470		1%	Ground Plane	Omni	2-3	100
201-70	25-174	•	•			2%	Omni	Omni	1	500
301-70				•		20	Omni	Omni	1	100
401-70					•	10%	Omni	Omni	1	100
928-70					•	75	Collinear Omni	Omni	8.5	500
531-70	30-76					7%	Exposed Dipole	Offset	2.5	300
532-70	30-76					7%	Exposed Dipole	Offset	5.5	300
871F-70F	88-108					20	Exposed Dipole	Offset	2	200
872F-70F	88-108					20	Exposed Dipole	Offset	5	450
874F-70F	88-108					20	Exposed Dipole	Offset	8	450
871F-70A		•				20	Exposed Dipole	Offset	2	200
872F-70A		•				20	Exposed Dipole	Offset	5	450
874F-70A		•				20	Exposed Dipole	Offset	8	450
871F-70			•			36	Exposed Dipole	Offset or Bi	2	200
872F-70			•			36	Exposed Dipole	Offset or Bi	5	450
874F-70			•			36	Exposed Dipole	Offset or Bi	8	450
871F-70-2	215-					10	Exposed Dipole	Offset or Bi	2	200
872F-70-2	215-					10	Exposed Dipole	Offset or Bi	5	300
874F-70-2	215-					10	Exposed Dipole	Offset or Bi	8	500
871F-70LM			•			36	Exposed Dipole	Offset or Bi	2	200
872F-70LM			•			36	Exposed Dipole	Offset or Bi	5	450
874F-70LM			•			36	Exposed Dipole	Offset or Bi	8	500
832-70			148-174			14	Exposed Dipole	Offset	3/6	500
834-70			148-174			14	Exposed Dipole	Offset	6/9	500
842-70			148-174			14	Exposed Dipole	Offset	3/6	500
844-70			148-174			14	Exposed Dipole	Offset	6/9	500
882-70A		108-138				30	Dipole Array	Omni or Bi	3/5.5	450
884-70A		108-138				30	Dipole Array	Omni or Bi	6/8.5	500
882-70			•			36	Dipole Array	Omni or Bi	3/5.5	450
884-70			•			36	Dipole Array	Omni or Bi	6/8.5	500
771-70				•		106	Exposed Dipole	Offset or Bi	2	75
772-70				•		106	Exposed Dipole	Offset or Bi	5	150
774-70				•		106	Exposed Dipole	Offset or Bi	8	300

*BW = Bandwidth in MHz or % of Center Frequency (CF)

BASE STATION ANTENNAS

Model	Other	118-138	138-174	406-512	746-960	BW* 1.5:1	Type	Pattern	Gain dBd	Watts
778-70				•		64	Exposed Dipole	Offset or Bi	11	300
782-70				•		64	Dipole Array	Omni or Bi	3-5.5	300
784-70				•		64	Dipole Array	Omni or Bi	6-8.5	300
776-70				•		106	Dual Dipole	Offset	5	300
845-70			148-174			14 (2:1)	Dual Dipole	Omni or Off	3/6	500
876-70			•			36	Dual Dipole	Offset	5	300
F-3676			•	406-470		36/64	Dual Dipole	Offset	8	300
F-3661			•	406-470		36/106	Dual Dipole	Offset	5	300
F-3647			•	406-470		36/106	Dual Dipole	Offset	2	300
F-3729			•			36	Reflector	Directional	2.5	200
F-3713			•			36	Reflector	Directional	7	450
F-3766			•			36	Reflector	Directional	9	450
792-70					•	150	Encl. Dipole	Offset	5	150
794-70					•	150	Encl. Dipole	Offset	8	300
799-70					•	150	Encl. Dipole	Offset	10	500
792-70R					•	150	Encl. Dipole	Directional	Up to 8	150
794-70R					•	150	Encl. Dipole	Directional	Up to 13	300
799-70R					•	150	Encl. Dipole	Directional	Up to 15	500
291-70			•			36	Yagi	Directional	3.5	350
295-70			•			4%	Yagi	Directional	6.5	350
290-70			•			4% C F	Yagi	Directional	9.5	350
250-70			•			36 (2:1)	Yagi	Directional	7	250
291-70-2	215-					10	Yagi	Directional	3.5	350
295-70-2	215-					10	Yagi	Directional	6.5	350
290-70-2	215-					10	Yagi	Directional	9.5	350
F-3872				•		24	Yagi	Directional	3.5	350
433-70				•		24	Yagi	Directional	6.5	350
430-70				•		24	Yagi	Directional	10	350
480-70				406-470		64	Yagi	Directional	10	350
982-70					•	30	Yagi	Directional	3.5	200
983-70					•	85	Yagi	Directional	6.5	200
980-70					•	85	Yagi	Directional	10	200
987-70					•	85	Yagi	Directional	12	200
490-70					806-960	85	Yagi	Directional	10	200
425-70				•		20	Radome Yagi	Directional	10	250
426-70				•		20	Radome Yagi	Directional	10	250

*BW = Bandwidth in MHz or % of Center Frequency (CF)

BASE STATION ANTENNAS

Model	Other	118-138	138-174	406-512	746-960	BW* 1.5:1	Type	Pattern	Gain dBd	Watts
490-70R					•	72	Radome Yagi	Directional	10	150
470-70			132-174			15% C F	Corner Refl.	Directional	7	250
471-70			132-174			15% C F	Corner Refl.	Directional	10	250
470-70-2	215-					10	Corner Refl.	Directional	7	250
471-70-2	215-					10	Corner Refl.	Directional	10	250
440-70				•		64	Corner Refl.	Directional	9.5	100
442-70				•		64	Corner Refl.	Directional	12	100
365-70				406-470		20	Parabolic Refl.	Directional	15	250
965-70					764-960	72	Parabolic Refl.	Directional	16.5	200
635-70			132-174			42	Log Periodic	Directional	6	500
645-70			132-174			42	Log Periodic	Directional	6	500
638-70			132-174			36	Log Periodic	Directional	8	500
415-70				•		40	Log Periodic	Directional	1	250
465-70				•		64	Log Periodic	Directional	6	250
590-					902-928	26	Data	Omni	2	200

*BW = Bandwidth in MHz or % of Center Frequency (CF)

Ground Plane Antenna Series

The Ground Plane Antenna Series are available in VHF and UHF configurations. These omnidirectional antennas are either wide band unity or 2-3 dB gain antennas. They are constructed from high strength, corrosion resistant aluminum alloy and stainless steel. All our antennas can be completely customized to your particular applications.

- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- Wide frequency band applications.
- The mounting hardware supplied will permit 0.75" to 2.38" O.D. pipe installation.
- DC ground for lightning protection.
- Ideal for mounting on buildings.

Electrical Specifications	265-70	266-70	267-70	268-70
Frequency Range, MHz	118-174	118-174	118-137	406-470
Nominal Gain, dBd	Unity	2-3.0	Unity	2-3.0
Bandwidth 1.5:1 VSWR, MHz (% Ctr. Freq.)	6%	1%	15.6% (2:1)	1%
Tuning	Field Adj.	Field Adj.	Fixed	Field Adj.
Polarization	Vertical	Vertical	Vertical	Vertical
Vertical Beamwidth (Ver. Pol.)	80°	40°	71°	38°
Pattern	Omni	Omni	Omni	Omni
Power Rating, Watts	300	250	250	100
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	265-70	266-70	267-70	268-70
Max. Length, in (mm)	58 (1473)	108 (2743)	67 (1702)	46 (1168)
Width, in (mm)	55 (1397)	46 (1168)	26.5 (673)	20 (508)
Weight, lbs. (kg)	6.8 (3.3)	6.5 (3.0)	6.0 (2.7)	1.5 (0.7)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	125 (201)	125 (201)	125 (201)
Rated Wind Velocity, 0.5" (13mm) Ice, mph	140(225)	85 (137)	110 (177)	85 (137)
Lateral Thrust @ 100 mph wind, lbs. (kg)	31.8	40 (18.1)	24 (10.7)	7.3 (3.3)
Bending Moment @top clamp: 100 mph, ft.*lb	41 (5.7)	94 (13)	28 (3.9)	12 (1.6)
Projected Area, ft ² (m ²)	1.2	1.57	0.88 (0.082)	0.27
Mounting Hardware Included	167-85 Clamp	167-85 Clamp	167-85 Clamp	167-85 Clamp

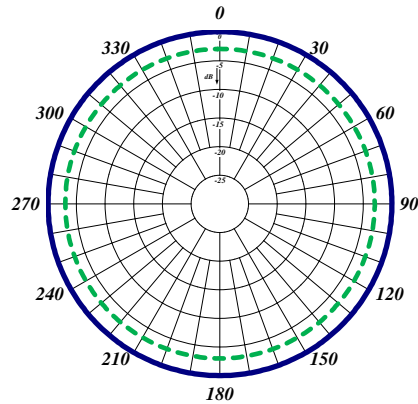
* See appendix for ordering information (page 226) *



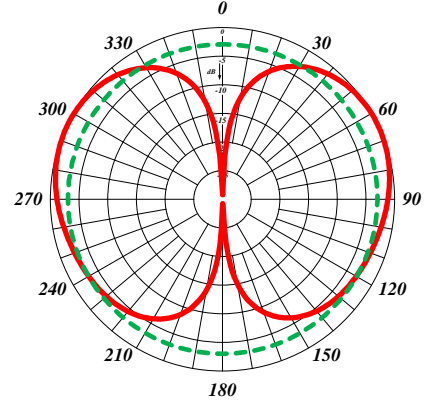
267-70



265-70



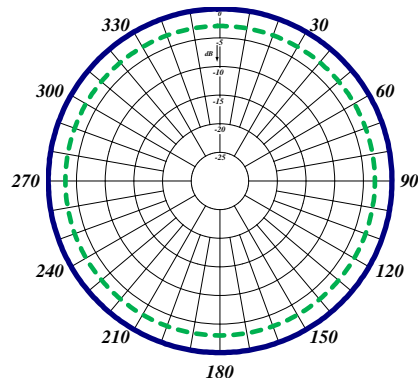
Horizontal Pattern



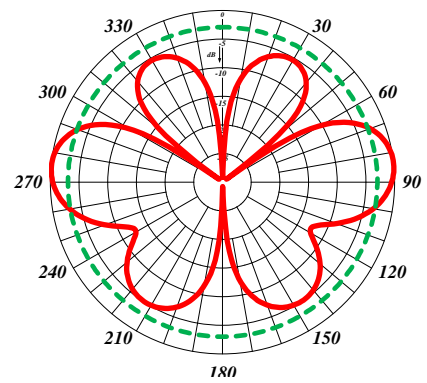
Vertical Pattern



266-70



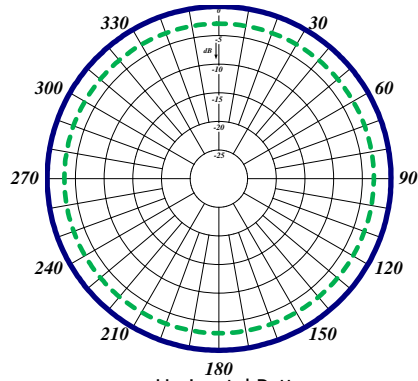
Horizontal Pattern



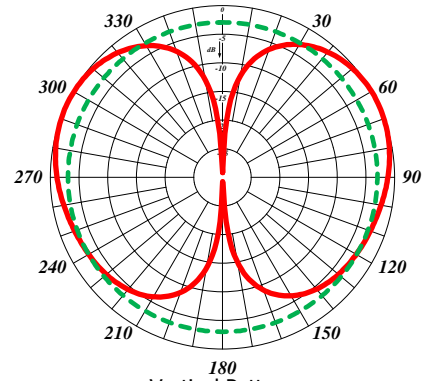
Vertical Pattern



267-70



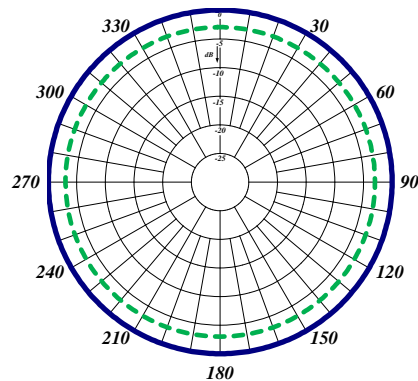
Horizontal Pattern



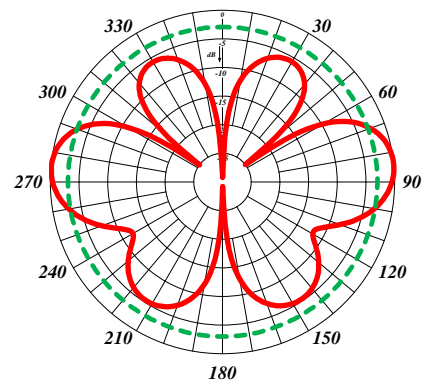
Vertical Pattern



268-70



Horizontal Pattern



Vertical Pattern

Omnidirectional Antenna Series

The Omnidirectional Antenna Series are available in VHF, UHF and 700/800/900 MHz configurations. These omnidirectional antennas are wide-band and unity gain. They are constructed from high strength, corrosion resistant aluminum alloy and stainless steel. All our antennas can be completely customized to your particular applications.

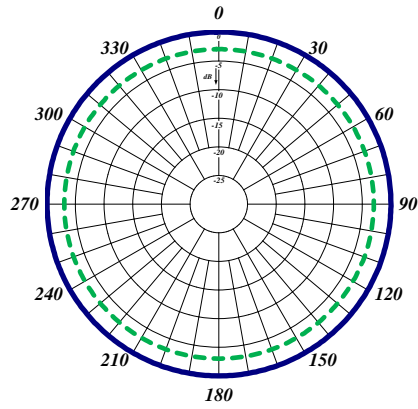
- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- The mounting hardware supplied will permit 0.75" to 2.3/8" O.D. pipe installation.
- DC ground for lightning protection.
- Because of the very large bandwidth, these are ideal antennas to stock, whether for emergency use or for resale.

Electrical Specifications	201-70	301-70	401-70
Frequency Range, MHz	25-174 MHz	406-512	746-960
Nominal Gain	Unity	Unity	Unity
Bandwidth 1.5:1 VSWR, MHz	2%	20	10%
Polarization	Vertical	Vertical	Vertical
Vertical Beam width (Ver. Pol.)	78°	75°	75°
Pattern	Omni	Omni	Omni
Power Rating, Watts	500	100	100
Nominal Impedance, Ohms	50	50	50
Lightning Protection	Star Gap	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	201-70	301-70	401-70
Max. Length, in (mm)	229 (5817)	24 (610)	21 (533)
Skirt Diameter, in (mm)	2.625 (67)	N/A	N/A
Whip Diameter, in (mm)	0.75 (19)	N/A	N/A
Weight, lbs. (kg)	17 (7.7)	1.4 (0.7)	1 (0.45)
Rated Wind Velocity, no ice, mph (km/h)	115 (185)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	N/A	100 (161)	100 (161)
Lateral Thrust @ 100 mph, ft.*lb (kg*m)	67 (30.4)	3.9 (1.8)	3.4 (1.6)
Bending Moment @top clamp: 100 mph, ft.*lb (kg*m)	308 (42.6)	1.84 (0.25)	1.87 (0.26)
Projected Area, ft² (m²)	2.5 (0.23)	0.15 (0.014)	0.13 (0.019)
Mounting Information Mast O.D. (mm) or Hardware Included	1.7" (42) O.D.	167-85 Clamp Included	167-85 Clamp Included
* See appendix for ordering information (page 226) *			

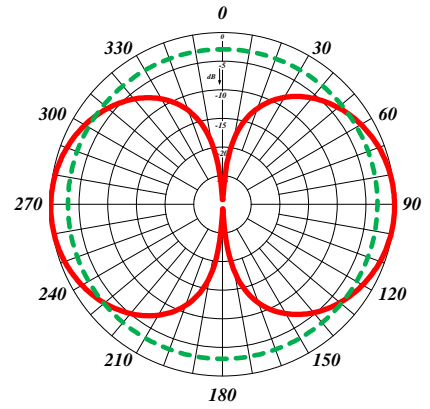




201-70



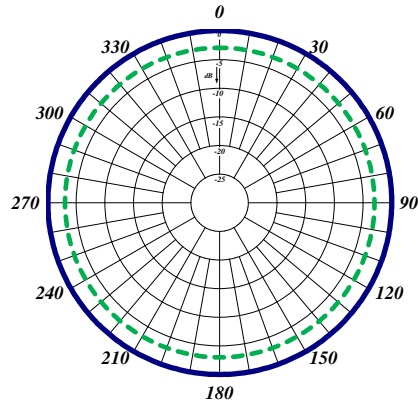
Horizontal Pattern



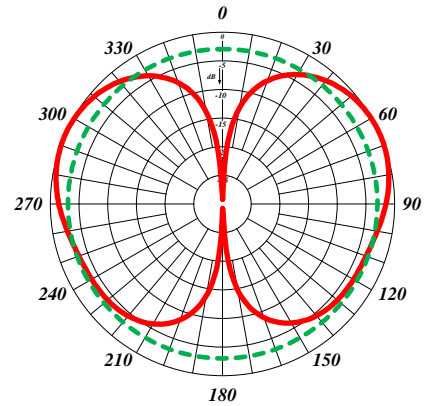
Vertical Pattern



301-70



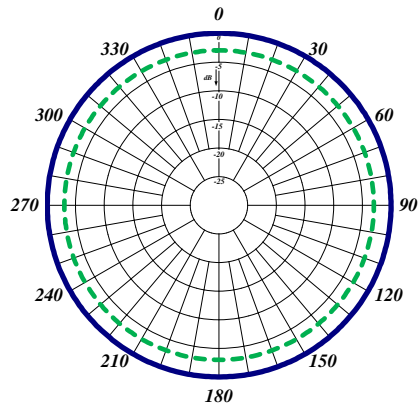
Horizontal Pattern



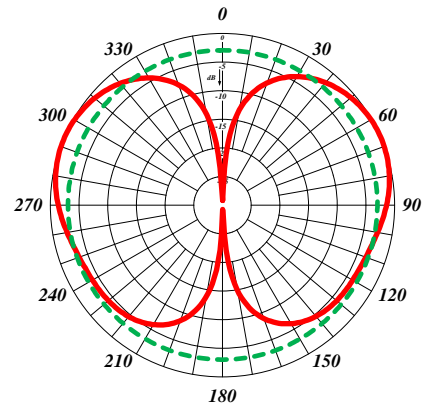
Vertical Pattern



401-70



Horizontal Pattern



Vertical Pattern

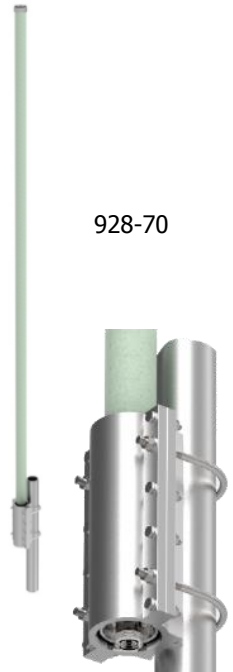
Collinear Omnidirectional Antenna

The 928-70 Collinear Omni Antenna is available in three frequency splits: 746-806; 806-869 or 885-960 within the 746 to 960 MHz range.

The antennas have an 8.5 dBd gain, and offer 6 fixed Electrical Downtilt options, based on customer requirements.

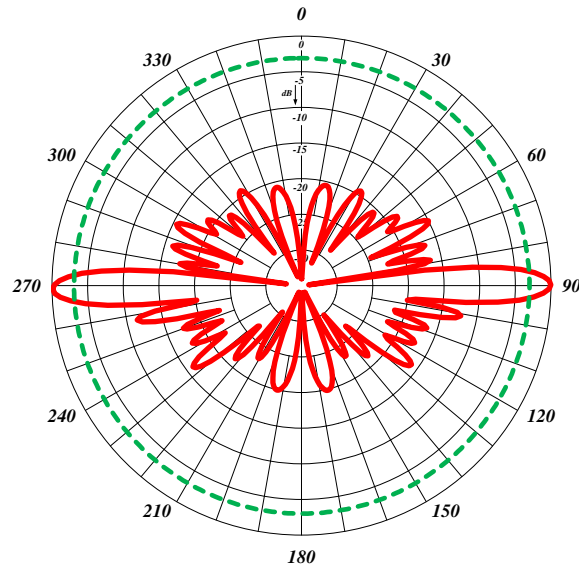
The antenna is constructed with a high-quality fiberglass light-grey radome. The aluminum mounting hardware is included with the antenna.

Electrical Specifications	928-70-1; 928-70-2; 928-70-3
Frequency Range, MHz (per Model 928-70-1; 928-70-2; 928-70-3)	746-806; 806-869; 885-960
Nominal Gain, dBd	8.5
Bandwidth 1.4:1 VSWR, MHz	75
Polarization	Vertical
Horizontal Beamwidth (°)	360
Vertical Beamwidth (°)	6.5
Electrical Downtilt—Fixed (Options) (°)	0, 1, 2, 3, 4, 5, 6
Pattern	Omnidirectional
3rd Order Intermodulation @ 2 X 43 dBm, dBc	< -150
Power Rating, Watts	500
Nominal Impedance, Ohms	50
Lightning Protection	DC Ground
Standard Termination	7/16 DIN-Female
Mechanical Specifications	928-70-1/2/3
Max. Length, in (mm)	130 (3310)
Diameter, in (mm)	2 (52)
Weight, lbs. (kg) - with mounting kit	26 (11.8)
Rated Wind Velocity, mph (km/h)	124 (200)
Radome Material	Fiberglass, light grey, RAL 7035
Radiating Element Material	Brass
Operational Temperature, °C	-55 to 70
Mounting Hardware Included	Pole mount included (U-bolts not included)
* See appendix for ordering information (page 226) *	

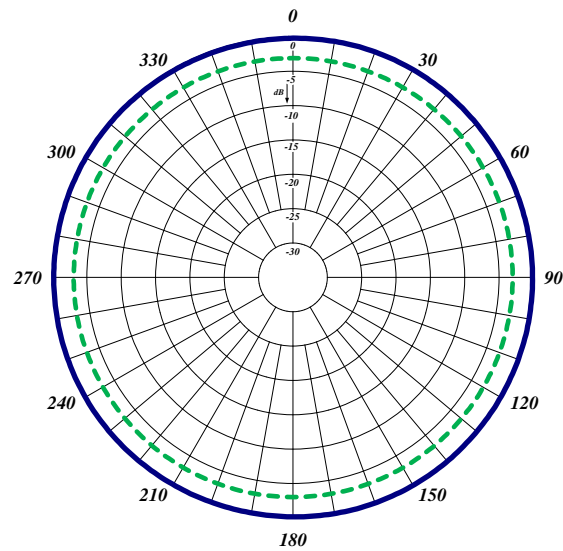




928-70



Vertical Pattern



Horizontal Pattern

530 Series Low Band Exposed Dipole Antenna

The Low Band Exposed Dipole Antenna Series are available in our standard or heavy-duty construction. These exposed dipole antennas come in both single and dual configurations, depending on the gain required. They are constructed from high strength, corrosion resistant aluminum alloy, hot galvanized steel mounting hardware, and use unique PVC off-set support arms. Our heavy-duty versions have dual support braces and use a superior anti-torque support. All components are oversized.

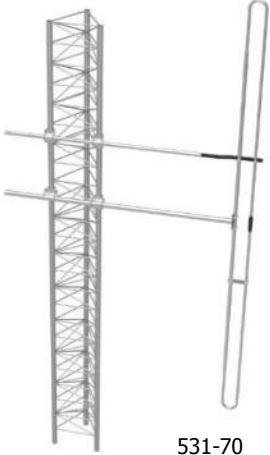
- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- Supplied with anti-torque supports.
- DC ground for lightning protection.
- Can be black anodized coating for enhanced anti-corrosion and de-icing properties

Electrical Specifications	531-70	531-70HD	532-70	532-70HD
Frequency Range, MHz	30-76	30-76	30-76	30-76
Nominal Gain, dBd	2.5	2.5	5.5	5.5
Bandwidth 1.5:1 VSWR, MHz	7%	7%	7%	7%
Polarization	Vertical	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset	Offset
Power Rating, Watts	300	300	300	300
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	531-70	531-70HD	532-70	532-70HD
Length @ 30 MHz, in (mm)	189 (4800)	189 (4800)	472 (11989)	472 (11989)
Width, in (mm)	87 (2210)	87 (2210)	87 (2210)	87 (2210)
Weight, lbs. (kg)	37 (17)	43 (19.5)	79 (36)	91 (41)
Rated Wind Velocity, No Ice, mph (km/h)	143 (230)	200 (322)	143 (230)	200 (322)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	98 (158)	160 (258)	98 (158)	160 (258)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	133 (60.8)	160 (72.3)	266 (121.6)	320 (144.6)
Projected Area, ft ² (m ²)	4.98 (0.46)	5.94 (0.55)	9.96 (0.92)	11.88 (1.10)
Mounting Information Mast O.D. (mm)	(4) 1.25"-2.38"	(6) 1.25"-2.38"	(8) 1.25"-2.38"	(12) 1.25"-2.38"

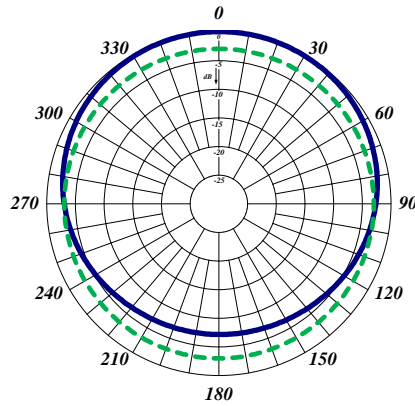


531-70HD

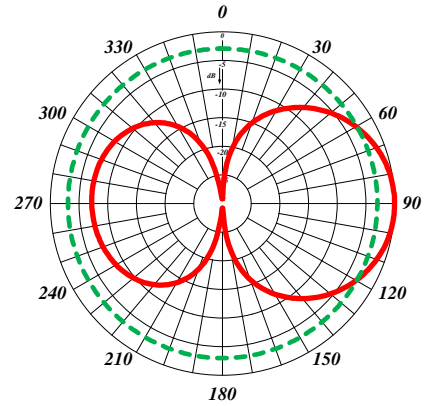
* See appendix for ordering information (page 226) *



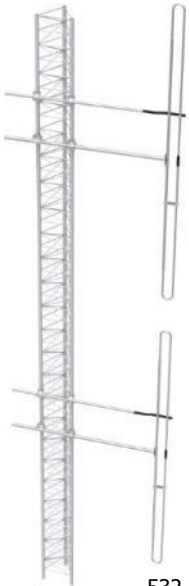
531-70



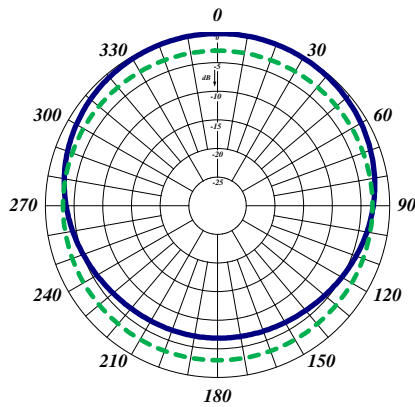
Horizontal Pattern



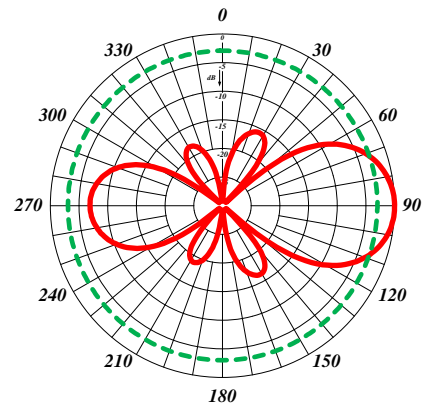
Vertical Pattern



532-70



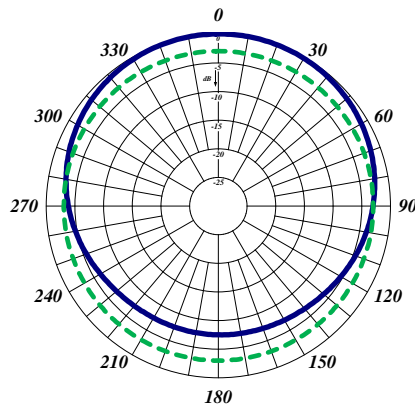
Horizontal Pattern



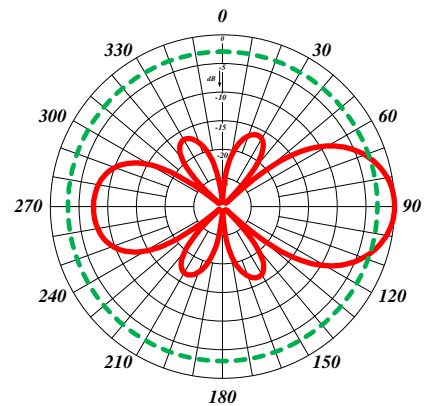
Vertical Pattern



532-70HD



Horizontal Pattern



Vertical Pattern

870 FM Series Exposed Dipole

The 870 FM Series Exposed Dipoles are available in 1, 2, 4 dipole configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable, or fixed, side or top mount, and heavy-duty versions are available.

- Each antenna is offered in a 1/4 or 3/8 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	871F-70F	872F-70F	874F-70F
Frequency Range, MHz	88-108	88-108	88-108
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	20	20	20
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	871F-70F	872F-70F	874F-70F
Length, in (mm)	114 (2896)	198 (5029)	350 (8890)
Width (3/8 Wave Spacing), in (mm)	47 (1194)	47 (1194)	49 (1245)
Weight, lbs. (kg)	19.1 (8.7)	37 (16.8)	137 (62)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	128 (206)	105 (169)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	118 (190)	100 (161)	84 (135)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	75 (34)	139 (63)	332 (151)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	60 (8.2)	596 (82)	3565 (493)
Projected Area, ft ² (m ²)	2.8 (0.26)	5.3 (0.49)	12.5 (1.17)
Mounting Information Mast O.D. (mm)	2.4" (61)	2.4" (61)	3.5" (89)

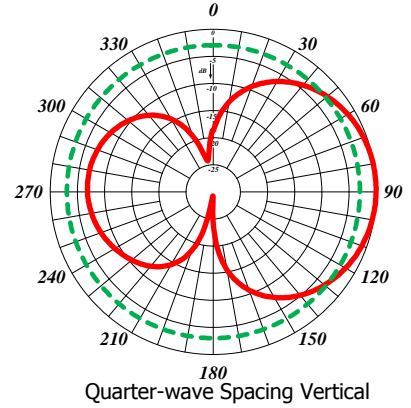
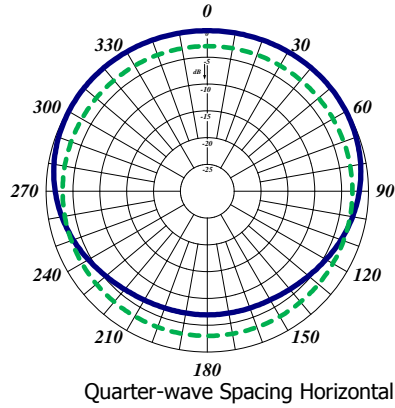
* See appendix for ordering information (page 227) *



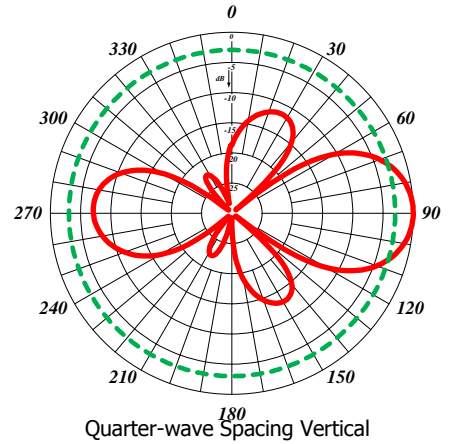
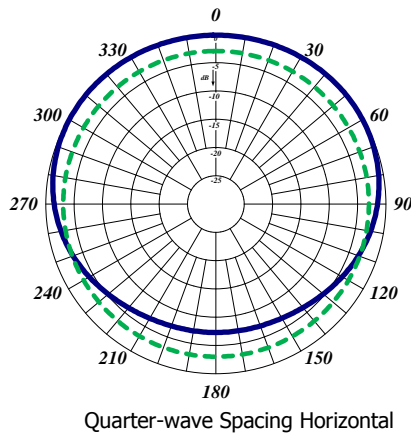
872-70F



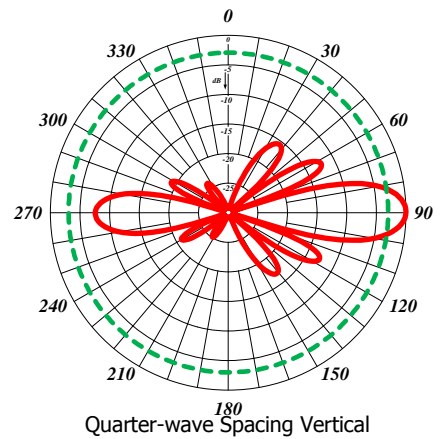
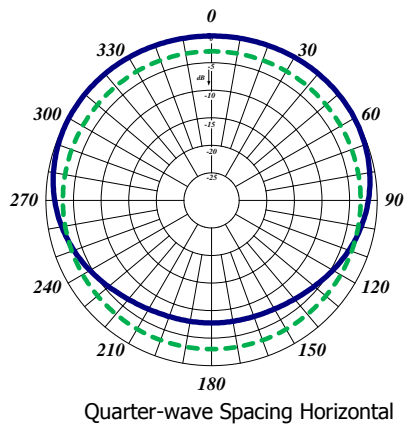
871F-70F



872F-70F



874F-70F



870 Series VHF Exposed Dipole

The 870 Series A – Aviation Series VHF Exposed Dipoles are available in 1, 2, 4 and dual dipole configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy-duty versions are available.

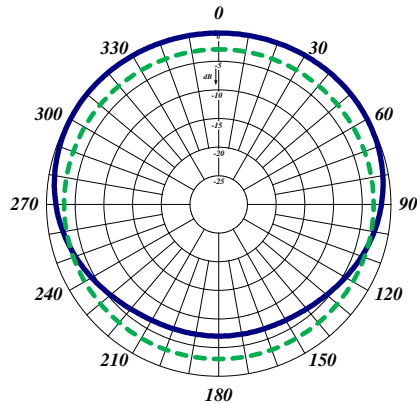
- Each antenna is offered in a 1/4 or 3/8 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	871F-70A	872F-70A	874F-70A
Frequency Range, MHz	118-138	118-138	118-138
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	20	20	20
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N	Type N	Type N
Mechanical Specifications	871F-70A	872F-70A	874F-70A
Length, in (mm)	78 (1981)	162 (4115)	294 (7468)
Width (3/8 Wave Spacing), in (mm)	54 (1372)	54 (1372)	55 (1397)
Weight, lbs. (kg)	16 (7.3)	31 (14.1)	93 (42)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	145 (3341)	120 (193)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	100 (161)	95 (153)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	57 (26)	120 (54.5)	231 (105)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	82 (11)	420 (58)	1437 (199)
Projected Area, ft ² (m ²)	2.2 (0.2)	4.6 (0.43)	8.8 (0.82)
Mounting Information Mast O.D. (mm)	2.4" (61)	2.4" (61)	2.9" (73)
* See appendix for ordering information (page 227) *			

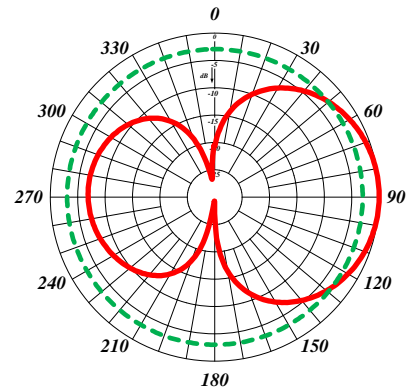




871F-70A



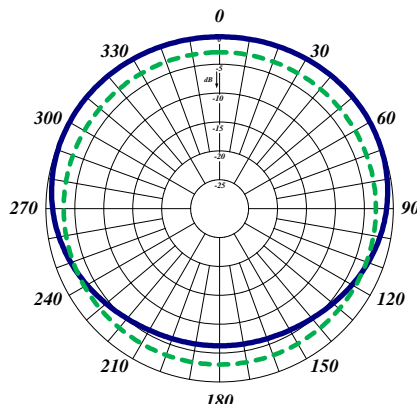
Quarter-wave Spacing Horizontal



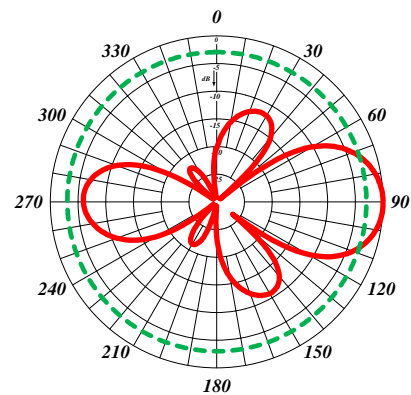
Quarter-wave Spacing Vertical



872F-70A



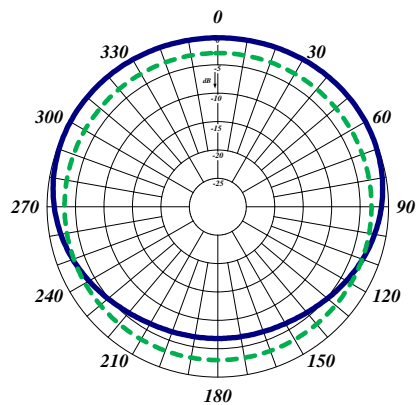
Quarter-wave Spacing Horizontal



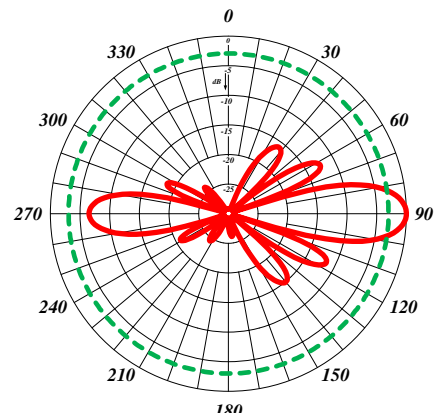
Quarter-wave Spacing Vertical



874F-70A



Quarter-wave Spacing Horizontal



Quarter-wave Spacing Vertical

870 Series VHF Exposed Dipoles

The 870 Series VHF Exposed Dipoles are available in 1, 2, 4, 8, dipole and dual dipole configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy-duty versions are available.

- Each antenna is offered in a 1/4, 3/8, or 1/2 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	871F-70	872F-70	874F-70
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	871F-70	872F-70	874F-70
Length, in (mm)	78 (1981)	126 (3200)	246 (6248)
Width (1/2 Wave Spacing), in (mm)	40 (1016)	40 (1016)	40 (1016)
Weight, lbs. (kg)	13 (6)	24 (10.8)	67 (30)
Rated Wind Velocity, No Ice, mph (km/h)	170 (274)	150 (241)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	145 (217)	135 (217)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (N)	45 (199)	92 (407)	206 (914)
Bending Moment @ top clamp: 100 mph, ft.*lb (N*m)	18 (24)	205 (278)	1440 (1953)
Projected Area, ft ² (m ²)	1.7 (0.16)	3.5 (0.33)	7.7 (0.72)
Mounting Information Mast O.D. (mm)	1.9" (48)	2.4" (61)	2.9" (73)

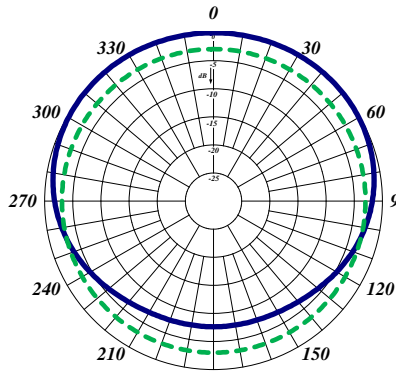
* See appendix for ordering information (page 227) *



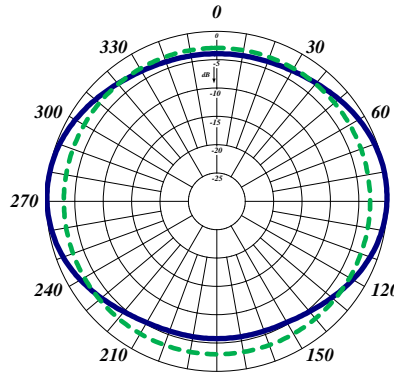
872F-70



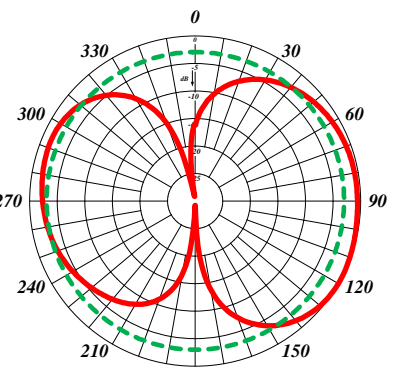
871F-70



Quarter-wave Spacing Horizontal



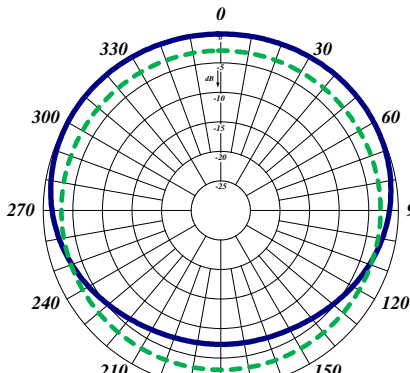
Half-wave Spacing Horizontal



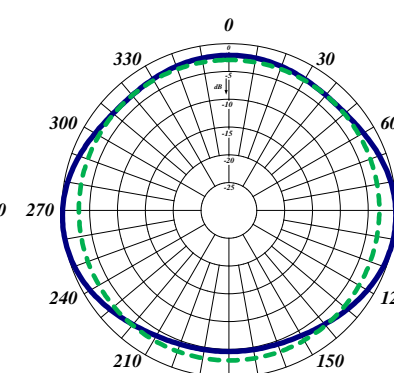
Half-wave Spacing Vertical



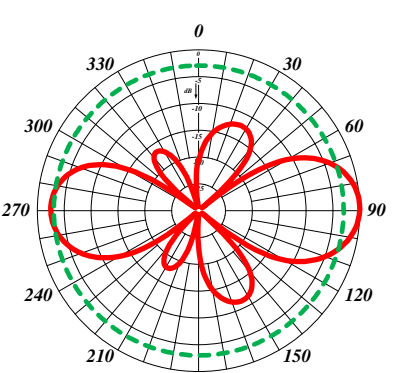
872F-70



Quarter-wave Spacing Horizontal



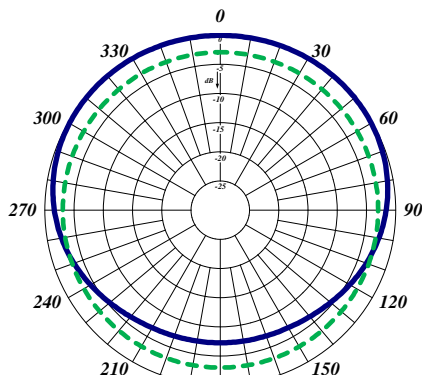
Half-wave Spacing Horizontal



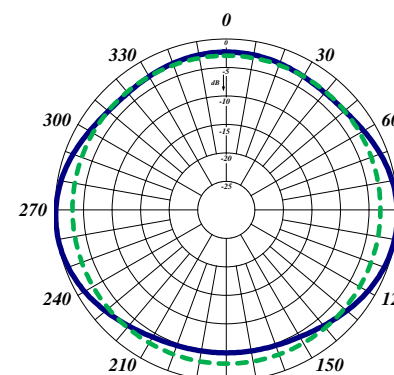
Half-wave Spacing Vertical



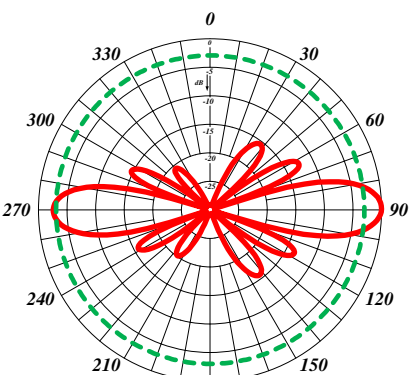
874F-70



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

870 LM Series VHF Exposed Dipoles

The 870 LM Series VHF Exposed Dipoles are available in 1, 2, 4, 8, dipole configurations. The LM stands for "Less Mast". The product includes the dipole, boom and clamps to mount the dipoles but no mast is supplied. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable-only, side mount or top mount, and heavy-duty versions are available.

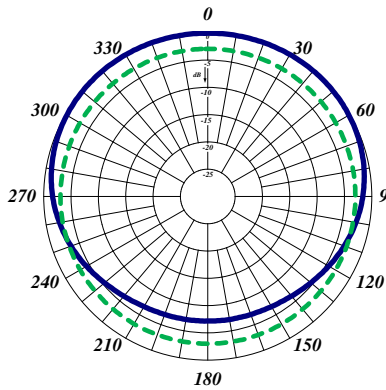
- Each antenna is offered in a 1/4, 3/8 or 1/2 wave spacing versions.
- The 870 LM series has external cabling and is field adjustable pattern
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	871-70LM	872-70LM	874-70LM
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	450	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	871-70LM	872-70LM	874-70LM
Length, in (mm)	Mast Not Included	Mast Not Included	Mast Not Included
Width (1/2 Wave Spacing), in (mm)	40 (1016)	40 (1016)	40 (1016)
Weight, lbs. (kg)	4.5 (2.0)	19 (8.6)	38 (17.2)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	135 (217)	135 (217)	135 (217)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	20 (9.1)	40 (18.2)	80 (36.5)
Projected Area, ft ² (m ²)	0.92 (0.08)	1.84 (0.17)	3.64 (0.34)
Mounting Hardware Included	181-85 Clamp	115R-85 Clamp	115R-85 Clamp
* See appendix for ordering information (page 227) *			

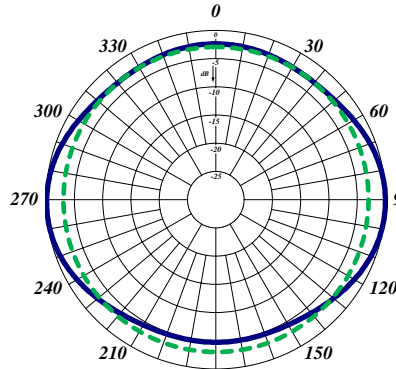




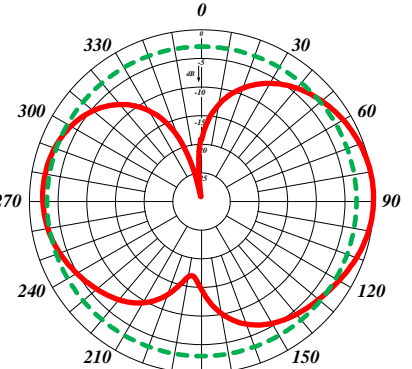
871-70LM



Quarter-wave Spacing Horizontal



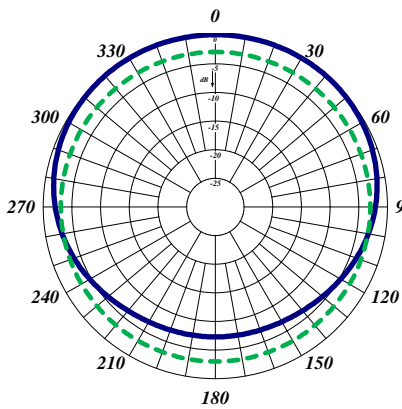
Half-wave Spacing Horizontal



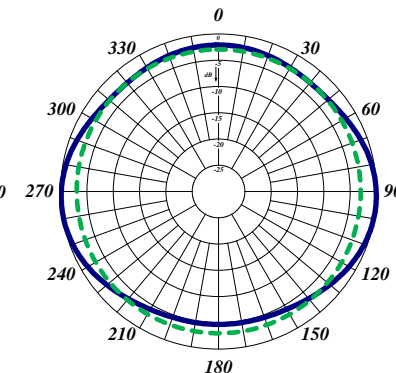
Half-wave Spacing Vertical



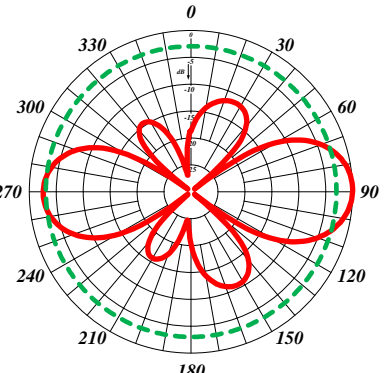
872-70LM



Quarter-wave Spacing Horizontal



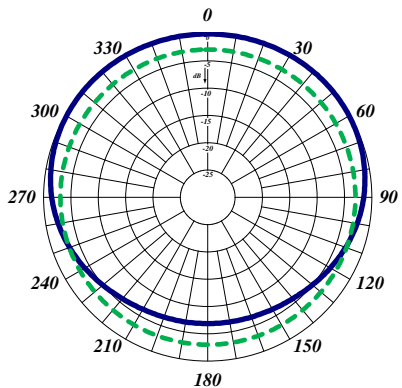
Half-wave Spacing Horizontal



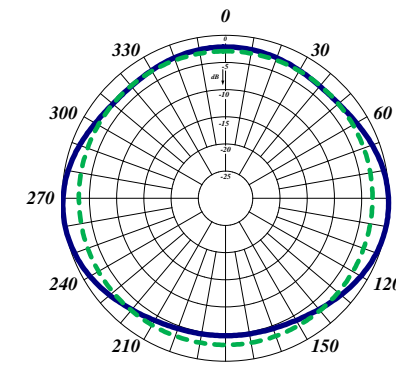
Half-wave Spacing Vertical



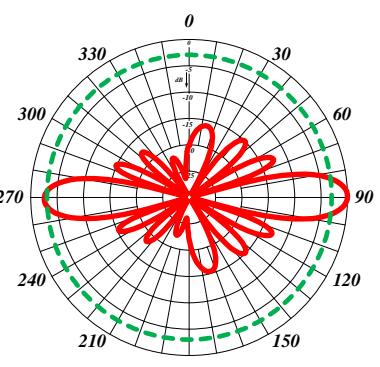
874-70LM



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

830 Series Light Duty VHF Dipoles

The 830 Series Light Duty VHF Exposed Dipoles are available in 2 and 4 dipole configurations. All our antennas can be completely customized to your applications.

- Low VSWR version with maximum gain over specified frequency.
- The 830 series has external cabling and fixed dipole-mast spacing.
- These antennas have an adjustable pattern for omnidirectional or offset coverage.
- The 834-70 antenna is shipped in two sections to be assembled on site.

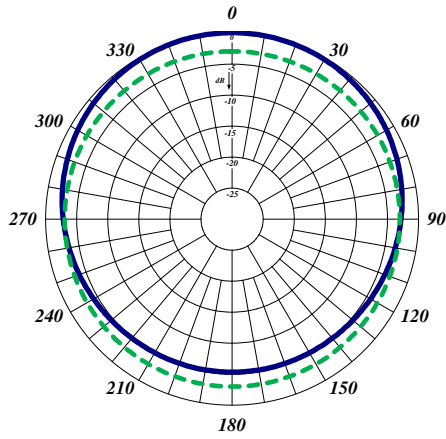
Electrical Specifications	832-70	834-70
Frequency Range, MHz	148-174	148-174
Nominal Gain, dBd	3.0/6.0	6.0/9.0
Number of Dipoles	2	4
Bandwidth 2.0:1 VSWR, MHz	14	14
Polarization	Vertical	Vertical
Pattern	Offset	Offset
Power Rating, Watts	500	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	832-70	834-70
Length, in (mm)	120 (3048)	244 (6198)
Width (1/2 Wave Spacing), in (mm)	9 (229)	9 (229)
Weight, lbs. (kg)	12 (5.5)	29 (13)
Rated Wind Velocity, No Ice, mph (km/h)	125 (201)	90 (145)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	90 (145)	65 (105)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	45 (200)	69 (307)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	150 (203)	787 (1067)
Projected Area, ft ² (m ²)	1.7 (0.16)	4.2 (0.39)
Mounting Hardware Included	107R-85 Clamp	107-85 Clamp
* See appendix for ordering information (page 227) *		



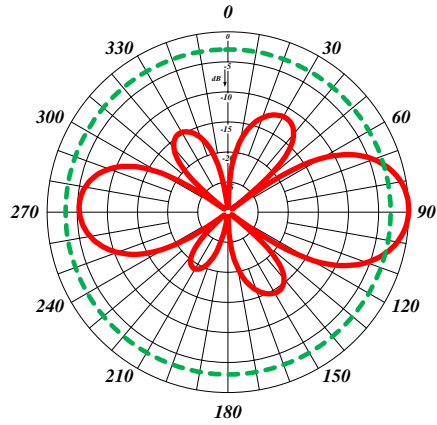
832-70



832-70



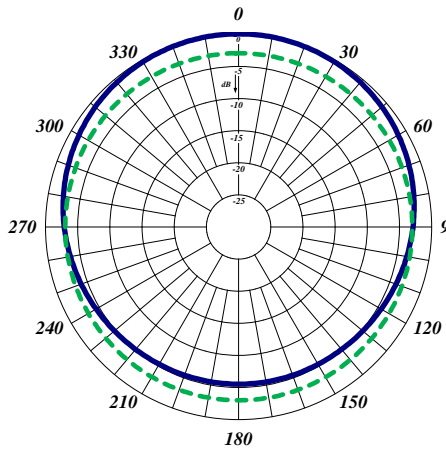
Horizontal Pattern



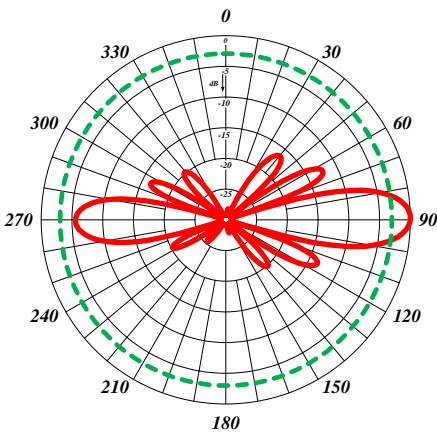
Vertical Pattern



834-70



Horizontal Pattern



Vertical Pattern

840 Series Light Duty VHF Dipoles

The 840 Series Light Duty VHF Exposed Dipoles are available in 2 and 4 dipole configurations. All our antennas can be completely customized to your applications.

- Low VSWR version with maximum gain over specified frequency.
- The 840 series has internal cabling and fixed dipole-mast spacing.
- These antennas have an adjustable pattern for omnidirectional or offset coverage.

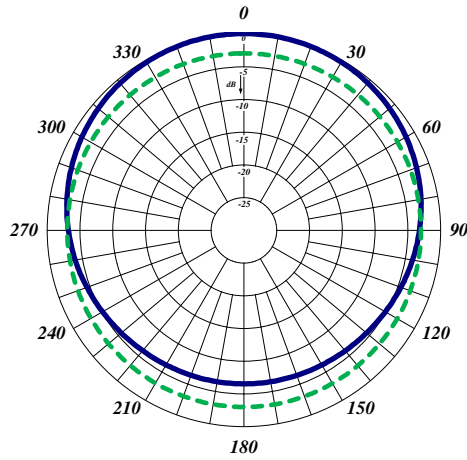
Electrical Specifications	842-70	844-70
Frequency Range, MHz	148-174	148-174
Nominal Gain, dBd	3.0/6.0	6.0/9.0
Number of Dipoles	2	4
Bandwidth 2.0:1 VSWR, MHz	14	14
Polarization	Vertical	Vertical
Pattern	Offset	Offset
Power Rating, Watts	500	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	842-70	844-70
Length, in (mm)	138 (3500)	270 (6858)
Width (1/2 Wave Spacing), in (mm)	9 (229)	9 (229)
Weight, lbs. (kg)	22 (10)	40 (18)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	115 (185)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	70 (31.8)	139 (63)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	167 (23.1)	514 (71)
Projected Area, ft ² (m ²)	2.6 (0.24)	5.2 (0.48)
Mounting Hardware Included	107-85 Clamp	107-85 Clamp
* See appendix for ordering information (page 228) *		



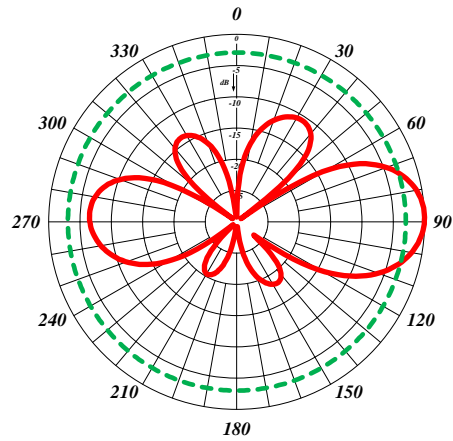
842-70



842-70



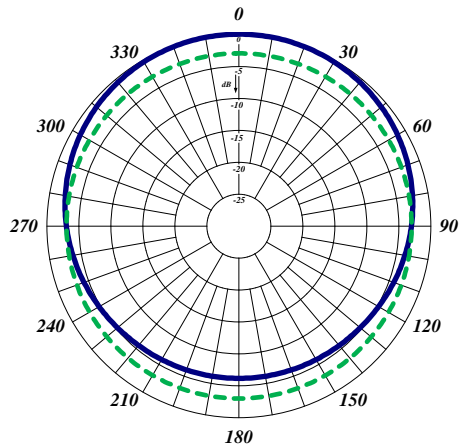
Horizontal Pattern



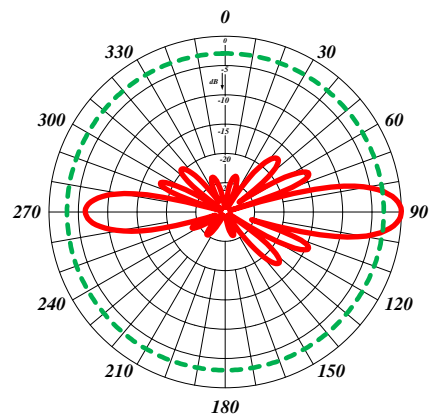
Vertical Pattern



844-70



Horizontal Pattern



Vertical Pattern

880A Series VHF Exposed Dipole Array

The 880A Series VHF Exposed Dipole Array are available in 2 and 4 dipoles set configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top mount only, and heavy-duty versions are available.

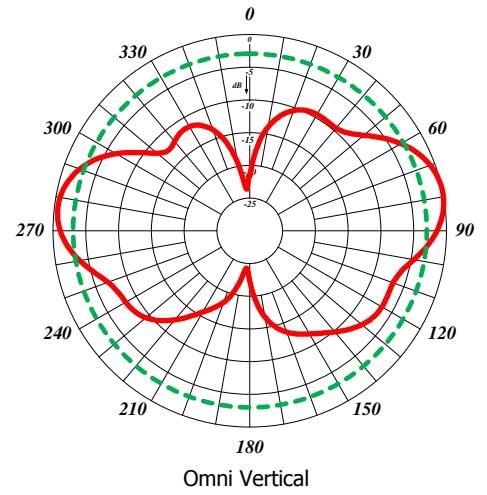
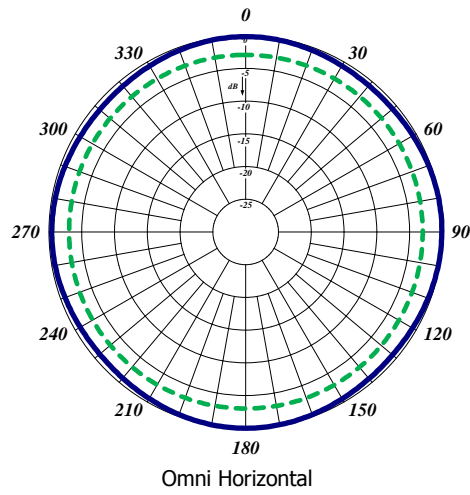
- Each antenna is offered in two versions: Omni or bidirectional. (Image shows Omni)
- These antennas have only internal cabling, fixed dipole-mast spacing and adjustable pattern control.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	882-70A	884-70A
Frequency Range, MHz	108-138	108-138
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	30	30
Polarization	Vertical	Vertical
Pattern	Omni or Bi-	Omni or Bi-
Power Rating, Watts	450	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	882-70A	884-70A
Length, in (mm)	157 (3988)	306 (7772)
Width, in (mm)	45 (1143)	46 (1168)
Weight, lbs. (kg)	49 (8.6)	105 (47.6)
Rated Wind Velocity, No Ice, mph (km/h)	140 (225)	100 (162)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	110 (177)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	154 (70)	307 (139)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	524 (72.5)	2039 (282)
Projected Area, ft ² (m ²)	5.6 (0.52)	11 (1.04)
Mounting Information: Mast O.D. (mm)	2.9" (73)	3.5" (89)
* See appendix for ordering information (page 228) *		

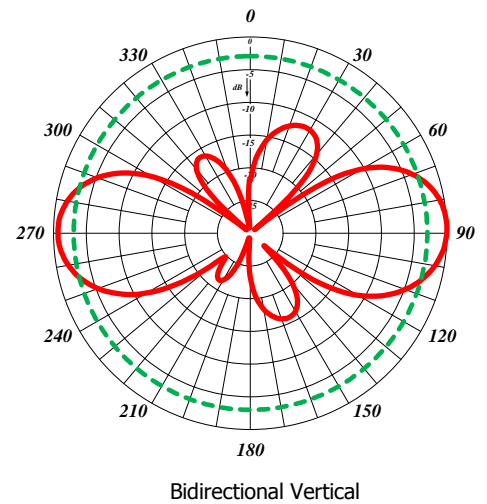
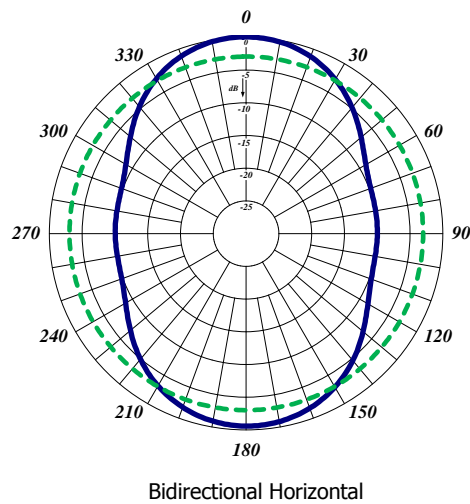




882-70A

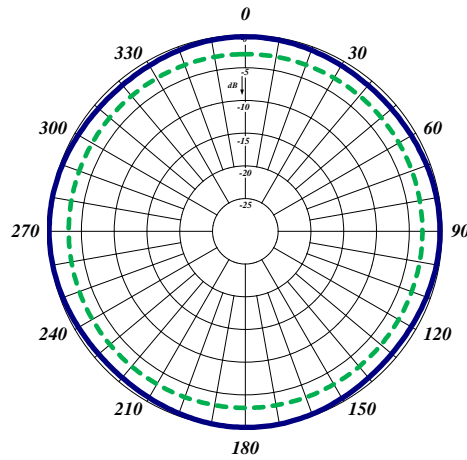


882-70A

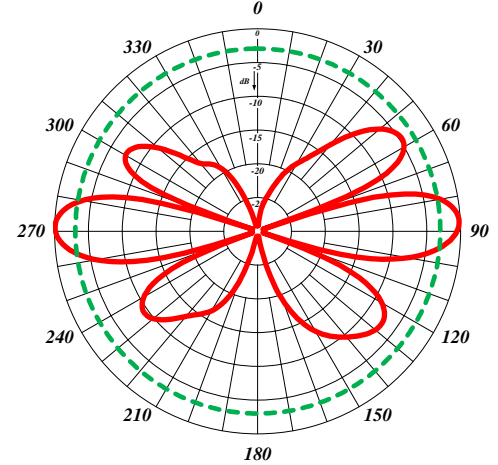




884-70A



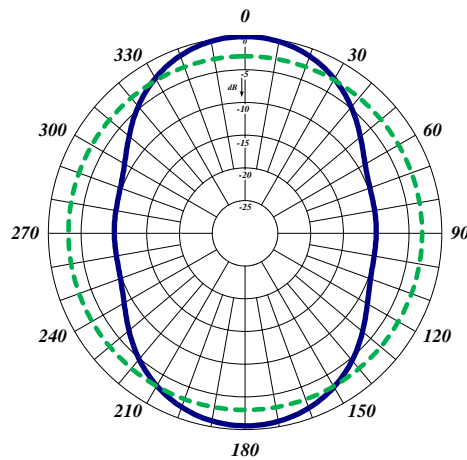
Omni Horizontal



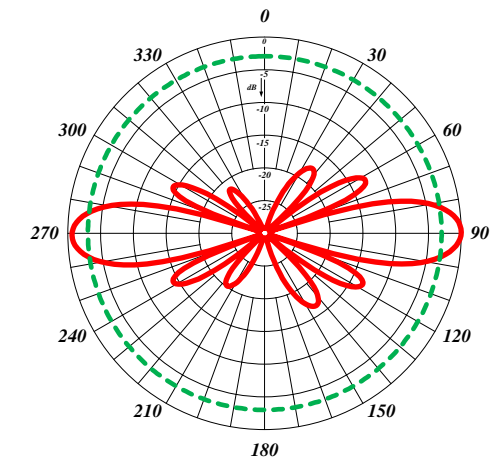
Omni Vertical



884-70A



Bidirectional Horizontal



Bidirectional Vertical

880 Series VHF Exposed Dipole Array

The 880 Series VHF Exposed Dipole Array are available in 2 and 4 dipoles set configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top mount only, and heavy-duty versions are available.

- Each antenna is offered in two versions: Omni or bidirectional. (Image shows Omni)
- These antennas have only internal cabling, fixed dipole-mast spacing, and adjustable pattern control.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

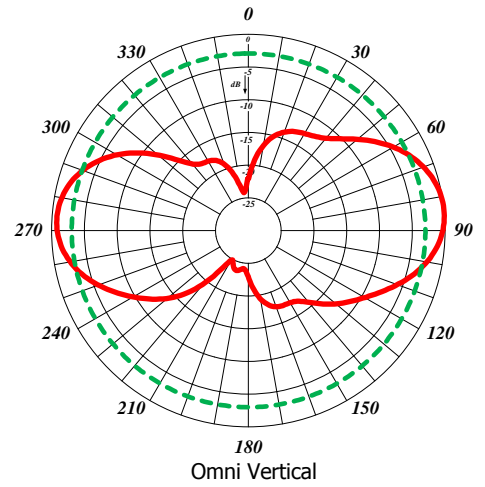
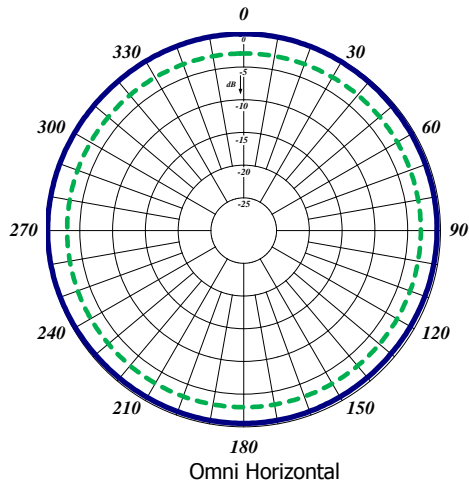
Electrical Specifications	882-70	884-70
Frequency Range, MHz	138-174	138-174
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	36	36
Polarization	Vertical	Vertical
Pattern	Omni or Bi-Dir.	Omni or Bi-Dir.
Power Rating, Watts	450	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N	Type N
Mechanical Specifications	882-70	884-70
Length, in (mm)	138 (3500)	246 (6248)
Width, in (mm)	30 (762)	31 (787)
Weight, lbs. (kg)	36 (16.3)	78 (35)
Rated Wind Velocity, No Ice, mph (km/h)	120 (162)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	95 (137)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	113 (51)	236 (107)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	351(49)	1264 (175)
Projected Area, ft ² (m ²)	4.1 (0.38)	8.7 (0.81)
Mounting Information: Mast O.D. (mm)	2.4" (61)	2.9" (73)
* See appendix for ordering information (page 228) *		



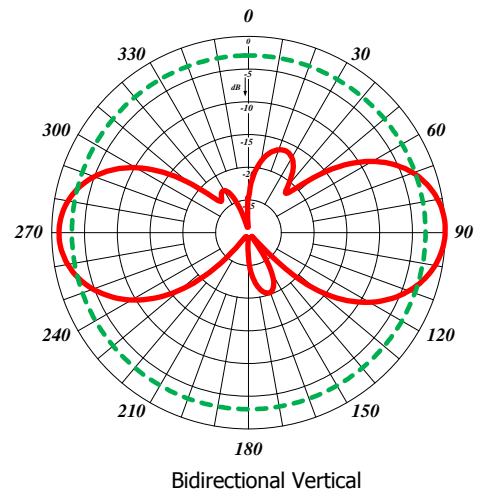
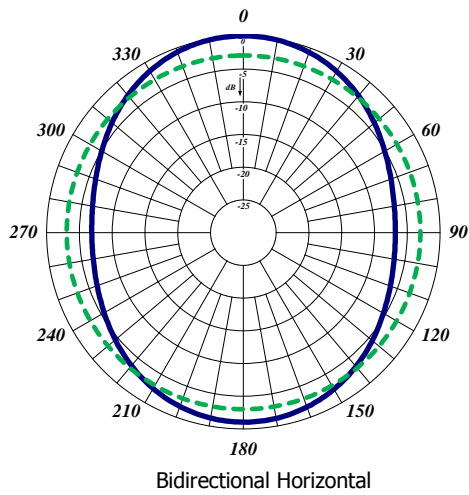
884-70



882-70

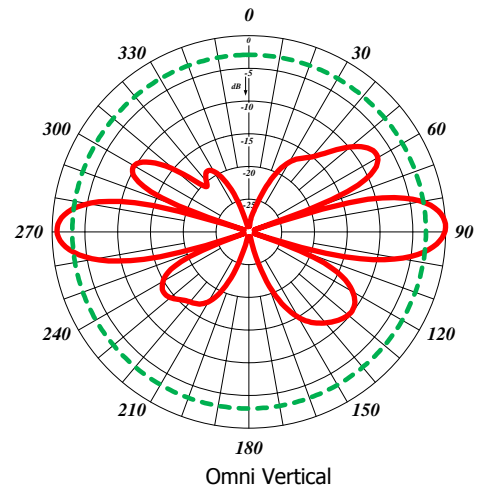
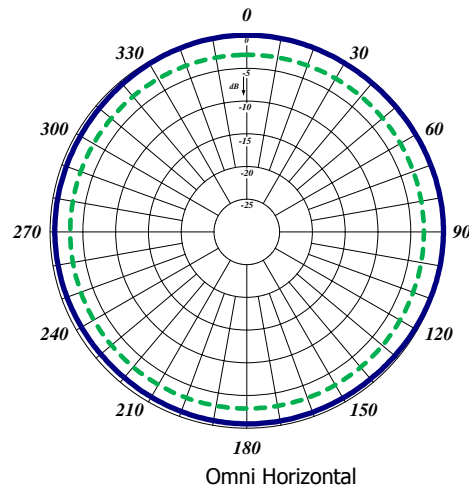


882-70

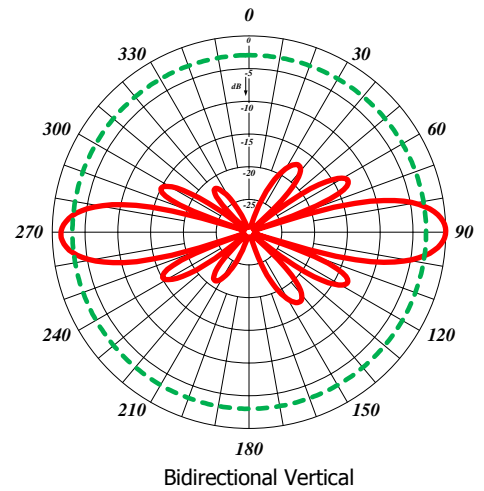
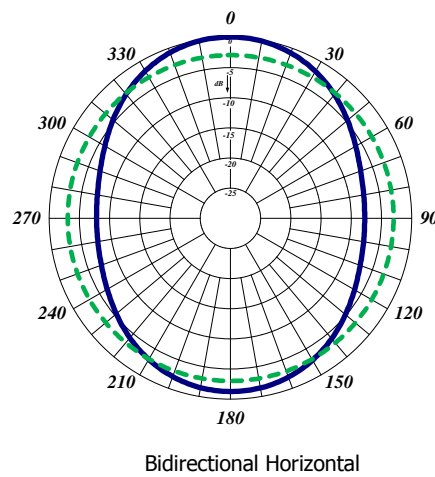




884-70



884-70



870 Series 220MHz Exposed Dipoles

The 870 Series 220MHz Exposed Dipoles are available in 1, 2, 4, 8 dipole configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable, or fixed, side mount or top mount, and heavy-duty versions are available.

- Each antenna is offered in a 1/4, 3/8 or 1/2 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

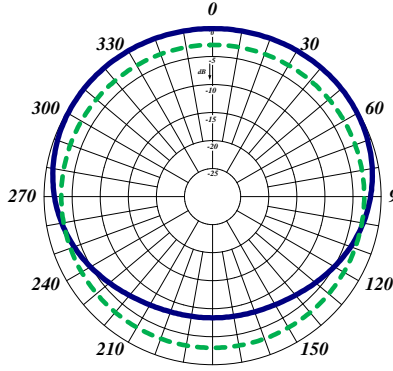
Electrical Specifications	871F-70-2	872F-70-2	874F-70-2
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	10	10	10
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N	Type N	Type N
Mechanical Specifications	871F-70-2	872F-70-2	874F-70-2
Length, in (mm)	66 (1676)	112 (2845)	200 (5080)
Width (1/2 Wave Spacing), in (mm)	31 (787)	31 (787)	32 (813)
Weight, lbs. (kg)	12.5 (5.7)	21 (9.5)	51 (23)
Rated Wind Velocity, No Ice, mph (km/h)	165 (266)	150 (241)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	140 (225)	130 (209)	105 (177)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	40 (18)	66 (30)	143 (65)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	58 (8)	150 (21)	610 (84)
Projected Area, ft ² (m ²)	1.5 (0.14)	2.6 (0.24)	5.5 (0.51)
Mounting Information Mast O.D. (mm)	1.9" (48)	1.9" (48)	2.4" (60)
* See appendix for ordering information (page 228) *			



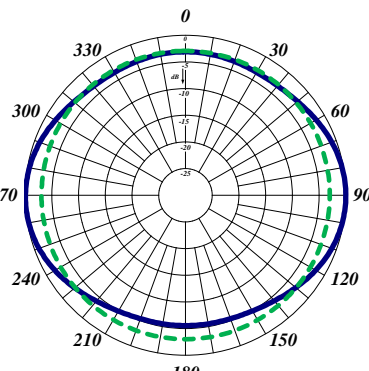
872F-70-2



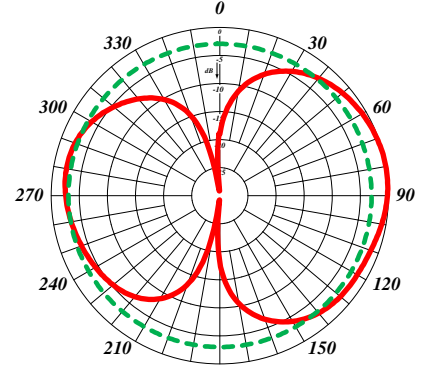
871F-70-2



Quarter-wave Spacing Horizontal



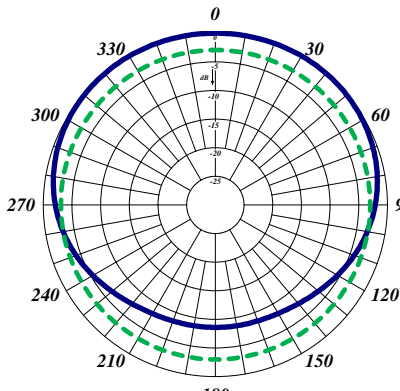
Half-wave Spacing Horizontal



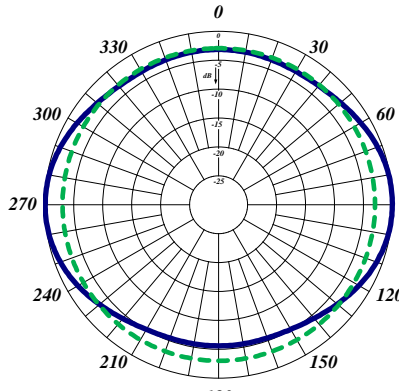
Half-wave Spacing Vertical



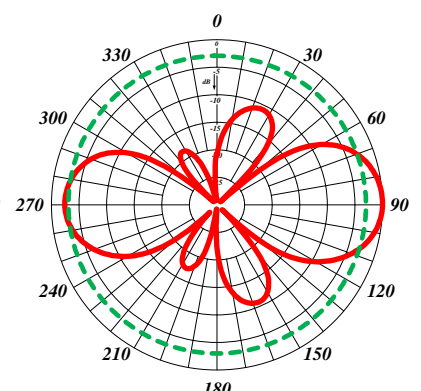
872F-70-2



Quarter-wave Spacing Horizontal



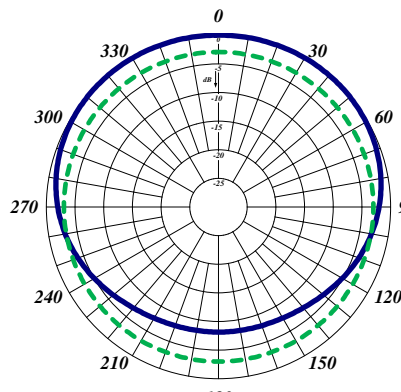
Half-wave Spacing Horizontal



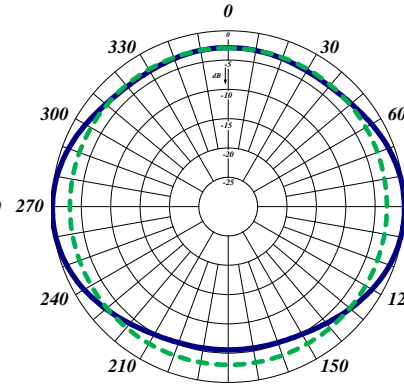
Half-wave Spacing Vertical



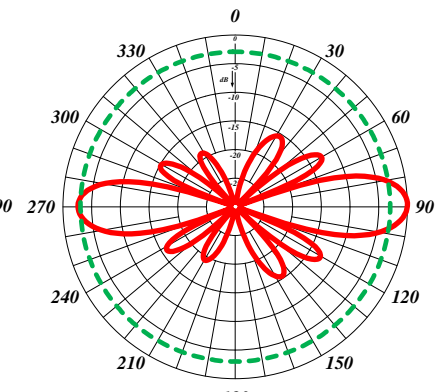
874F-70-2



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

860 Series 160/220MHz Exposed Dipoles

The 866F-70SM-40 is a dual band multicoupling antenna design-system. It has a configuration of two sets of two Dipoles each capable of working in the VHF band as well as the 220MHz band. The isolation between the sets of antennas is 40 dB. This antenna has a rugged design to withstand harsh environmental conditions.

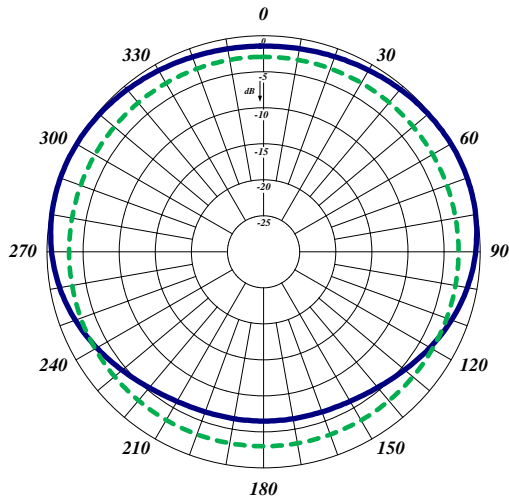
- Our antennas can be black anodized, fully welded, and heavy-duty versions are available.
- DC Ground Lightning protection
- Please contact our Technical Support team for consultation.

Electrical Specifications	866F-70SM-40
Frequency Range, MHz	155-165 & 215-225
Nominal Gain, dBd	5.0-5.5
Number of Dipoles	2 sets of 2
Bandwidth 1.5:1 VSWR, MHz	10
Isolation, dB	40
Polarization	Vertical
Pattern	Offset
Power Rating, Watts	300
Nominal Impedance, Ohms	50
Lightning Protection	DC Ground
Standard Termination	Type N Male
Mechanical Specifications	866F-70SM-40
Length, in (mm)	240 (6096)
Width (1/2 Wave Spacing), in (mm)	36 (914)
Weight, lbs. (kg)	55 (25)
Rated Wind Velocity, No Ice, mph (km/h)	155 (249)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	125 (201)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	172 (78)
Projected Area, ft ² (m ²)	5.8 (0.54)
Mounting Information Mast O.D. (mm)	2.88" (73)
* Please call us for ordering information *	

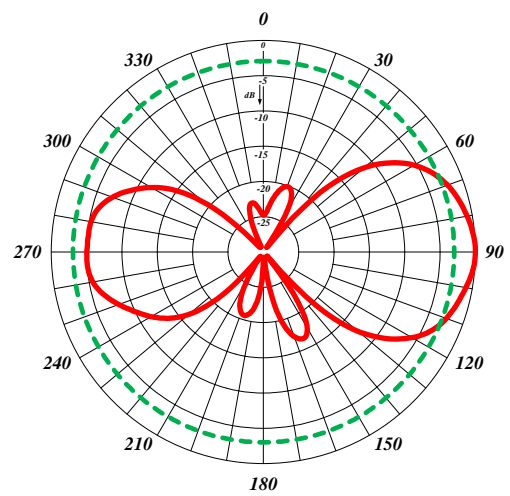




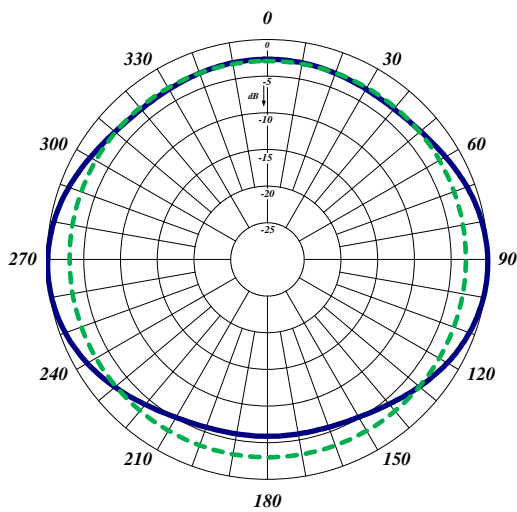
Horizontal Pattern (160MHz at top)



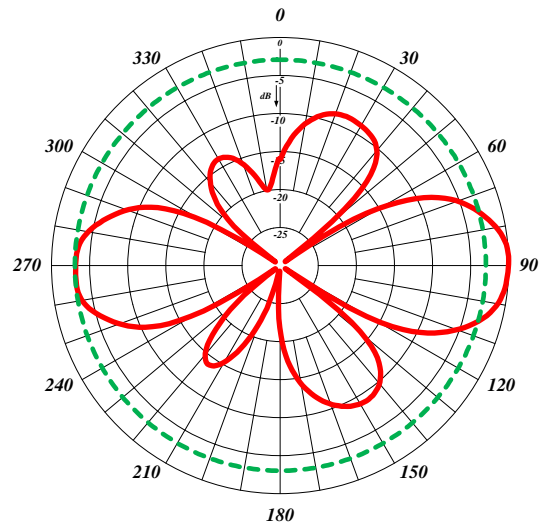
Vertical Pattern (160MHz at top)



Horizontal Pattern (220MHz at bottom)



Vertical Pattern (220MHz at bottom)



770 Series UHF Exposed Dipoles

The 770 Series UHF Exposed Dipoles are available in 1, 2, 4, 8 and dual dipole configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy-duty versions are available.

- Each antenna is offered in a 1/4, 3/8, or 1/2 wave versions.
- The 77X-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty Versions are available. Please contact our Technical Support team for consultation.

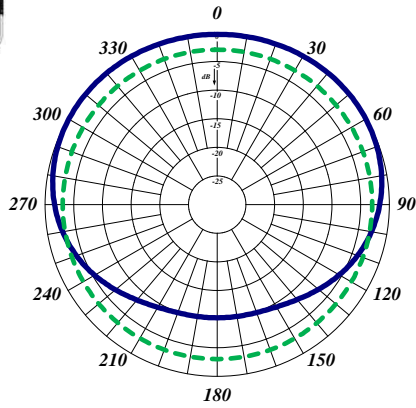
Electrical Specifications	771-70	772-70	774-70	778-70
Frequency Range, MHz	406-512	406-512	406-512	406-512
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5	11.0-11.5
Number of Dipoles	1	2	4	8
Bandwidth 1.5:1 VSWR, MHz	106	106	106	64
Polarization	Vertical	Vertical	Vertical	Vertical
Pattern	Offset / Bi	Offset / Bi	Offset / Bi	Offset / Bi
Power Rating, Watts	75	150	300	300
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	771-70	772-70	774-70	778-70
Length, in (mm)	66 (1676)	86 (2184)	126 (3200)	210 (5334)
Width, in (mm)	16 (406)	16 (406)	16 (406)	17 (432)
Weight, lbs. (kg)	8.6 (3.9)	12.6 (5.7)	21 (9.5)	52 (23.6)
Rated Wind Velocity, No Ice, mph (km/h)	170 (274)	160 (257)	150 (241)	140 (225)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	145 (233)	135 (217)	120 (193)	105 (169)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	27 (12.3)	39 (17.8)	64 (29)	134 (61)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	33.5 (4.6)	72 910)	177 (24.5)	655 (91)
Projected Area, ft ² (m ²)	1 (0.09)	1.5 (0.14)	2.4 (0.23)	5.1 (0.472)
Mounting Information: Mast O.D. (mm)	1.9" (48)	1.9" (48)	1.9" (48)	2.4" (61)
* See appendix for ordering information (page 228) *				



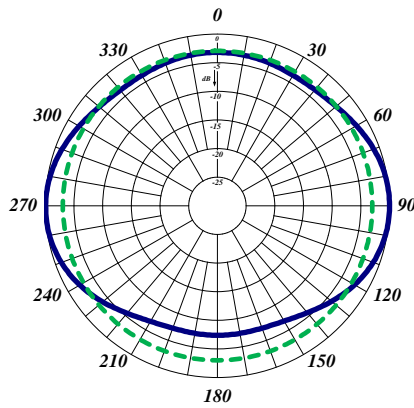
772-70



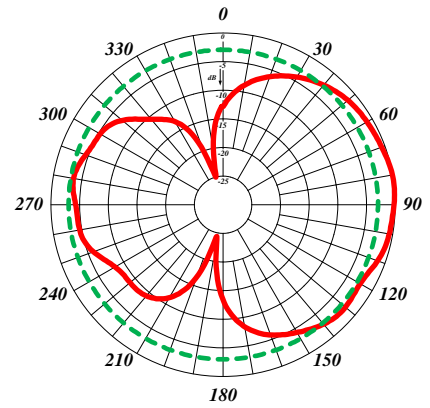
771-70



Quarter-wave Spacing Horizontal



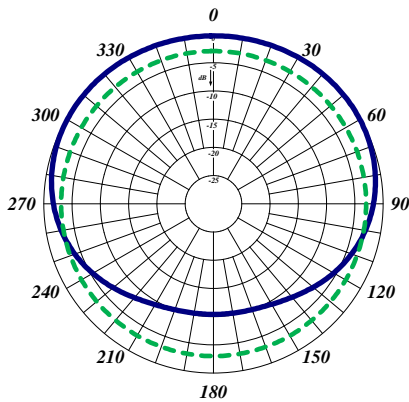
Half-wave Spacing Horizontal



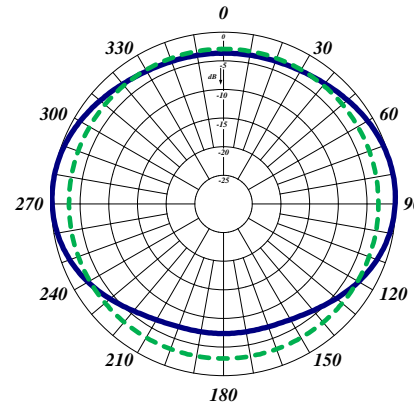
Half-wave Spacing Vertical



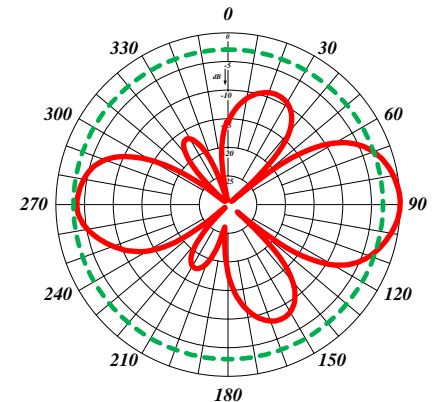
772-70



Quarter-wave Spacing Horizontal



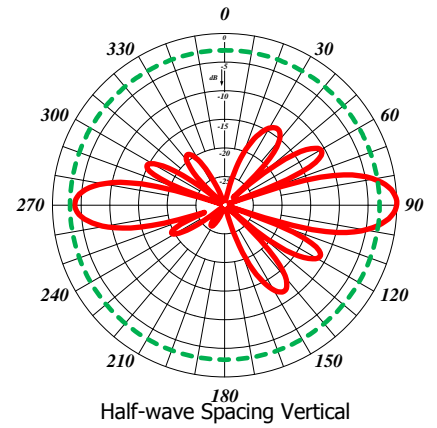
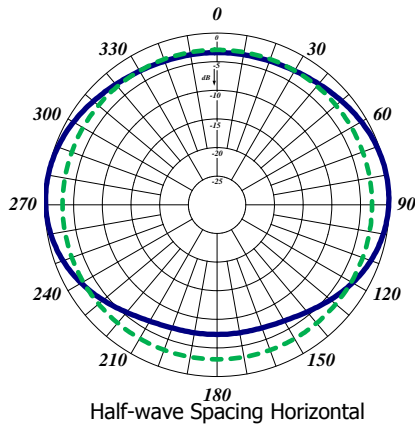
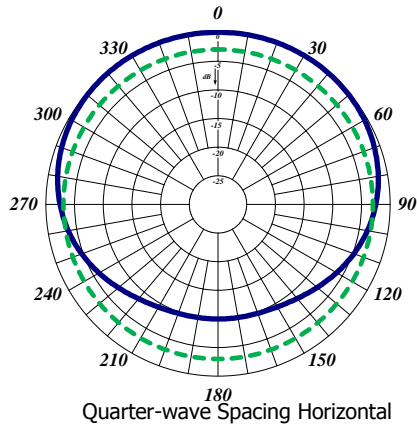
Half-wave Spacing Horizontal



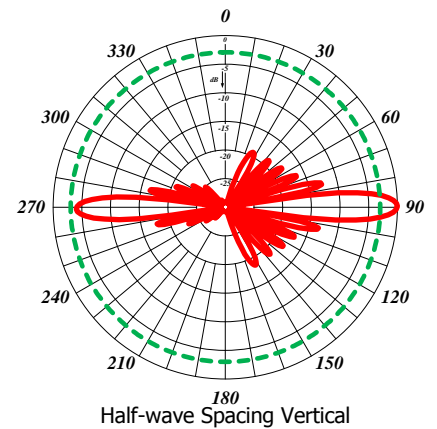
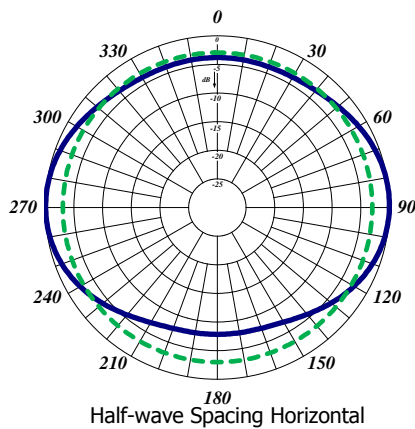
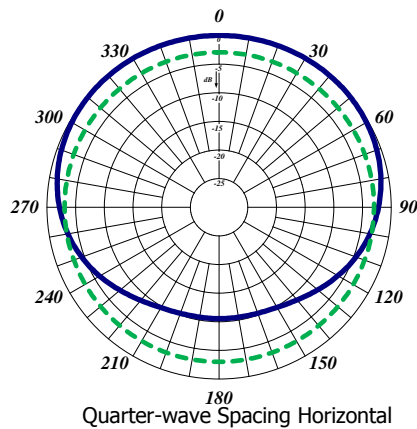
Half-wave Spacing Vertical



774-70



778-70



780 Series UHF Exposed Dipole Array

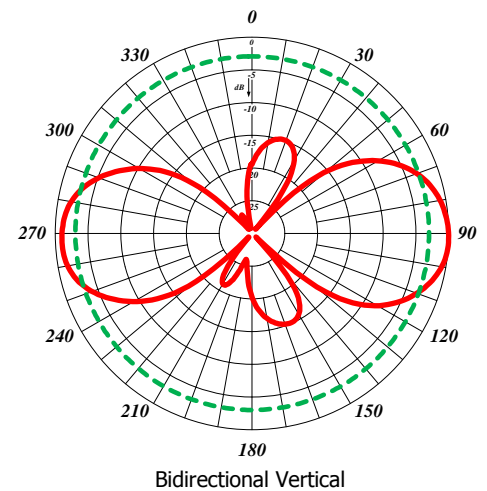
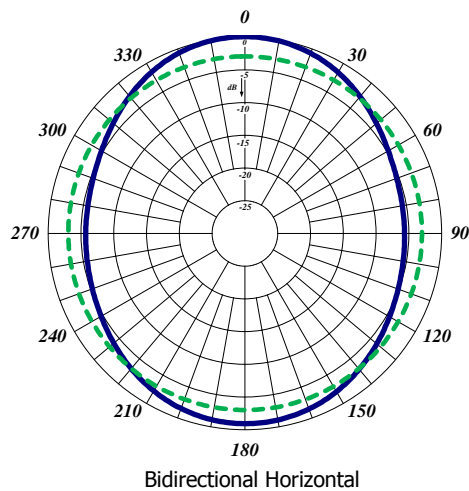
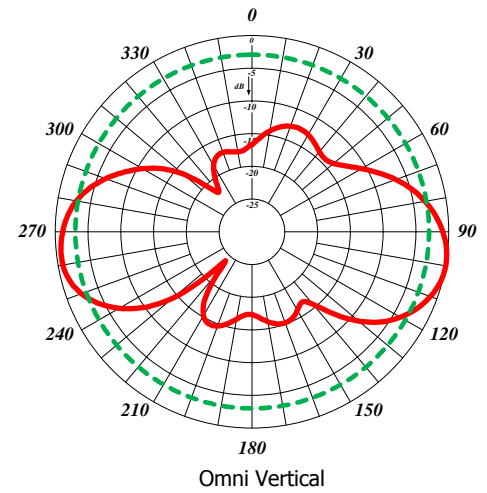
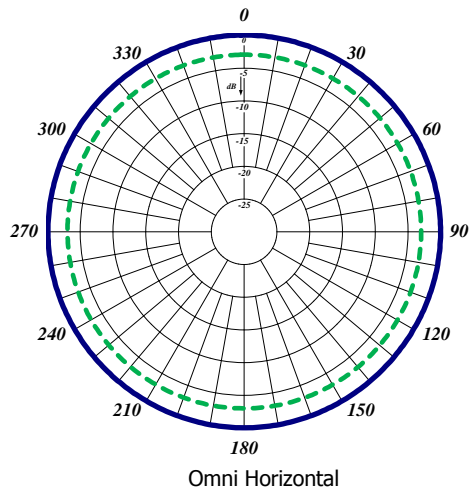
The 780 Series UHF Exposed Dipole Arrays are available in 2 and 4 dipoles set configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top or side mount configuration, and heavy-duty versions are available.

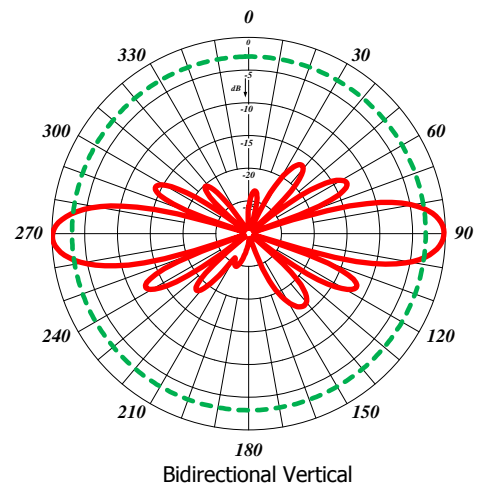
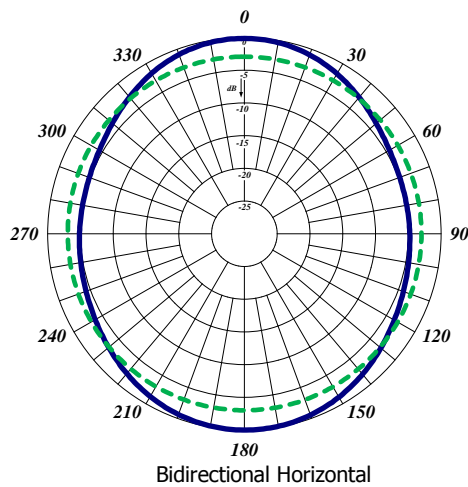
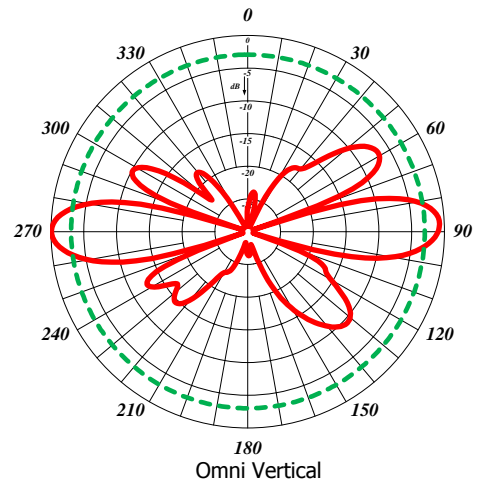
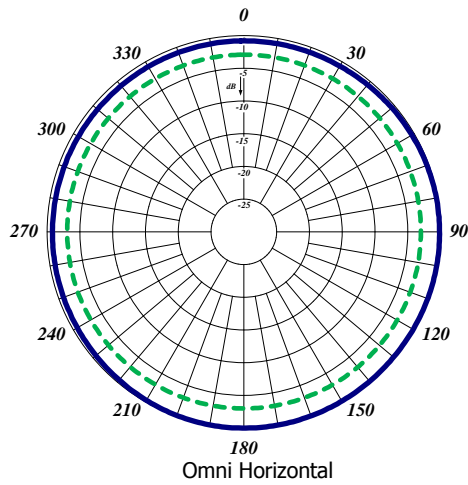
- Each antenna is offered in two versions: Omni or bidirectional.
- Antennas have complete internal cabling, fixed dipole-mast spacing, and adjustable pattern control.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	782-70	784-70
Frequency Range, MHz	406-512	406-512
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	64	64
Polarization	Vertical	Vertical
Pattern	Omni or Bi-Dir.	Omni or Bi-Dir.
Power Rating, Watts	300	300
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N	Type N
Mechanical Specifications	782-70	784-70
Length, in (mm)	90 (2286)	126 (3200)
Width, in (mm)	12.75 (324)	12.75 (324)
Weight, lbs. (kg)	25 (11.3)	38 (17)
Rated Wind Velocity, No Ice, mph (km/h)	145 (233)	130 (209)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	100 (161)	90 (145)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	54 (24.5)	101 (46)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	137 (19)	426 (59)
Projected Area, ft ² (m ²)	2.0 (0.19)	3.5 (0.33)
Mounting Information: Mast O.D. (mm)	1.9" (48)	2.4" (60)
* See appendix for ordering information (page 229) *		



782-70





Dual Feed Exposed Dipole Array

The Dual Feed Exposed Dipole Arrays are available in many different configurations. Our VHF, UHF or 700/800/900 MHz antennas can be combined into one mast. These antennas can be mixed and matched with our 840, 870, 880, 770 and 790 series antennas. All our antennas can be completely customized to your particular applications. Our antennas can be configured for side mount or top mount.

- Low VSWR version with maximum gain over specified frequency.
- Ideal for applications where costs are calculated per antenna.
- Heavy-duty versions are available.
- The 845 series has an adjustable pattern for 3 dBd omnidirectional or 6 dBd offset coverage.
- Typical antenna to antenna isolation is 30dB, 40 dB of isolation is also available.

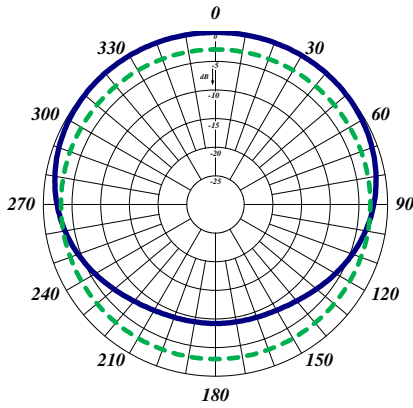
Electrical Specifications	776-70	845-70	876-70
Frequency Range, MHz	406-512	148-174	138-174
Nominal Gain, dBd	5.0-5.5	3.0 or 6.0	5.0-5.5
Number of Dipoles	2 sets of 2	2 sets of 2	2 sets of 2
Bandwidth VSWR, MHz	1.5:1 (106)	2:1 (14)	1.5:1 (36)
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Omni or Offset	Offset
Power Rating, Watts	300	500	300
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	776-70	845-70	876-70
Length, in (mm)	126 (3200)	270 (6858)	246 (6248)
Width (1/2 Wave Spacing), in (mm)	16 (406)	9 (229)	40 (1016)
Weight, lbs. (kg)	19 (8.6)	42 (19)	67 (30)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	110 (177)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	150 (241)	80 (129)	95 (153)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	44 (20)	139 (63)	160 (72.6)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	193 (26.7)	514 (71)	1364 (188.7)
Projected Area, ft ² (m ²)	1.38 (0.128)	5.2 (0.48)	7 (0.65)
Mounting Information Mast O.D. (mm)	1.9" (48)	107-85	2.9" (61)

* See appendix for ordering information (page 229) *

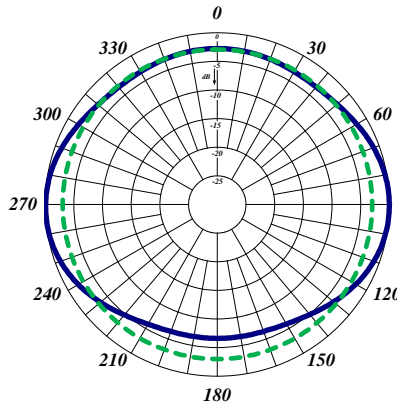




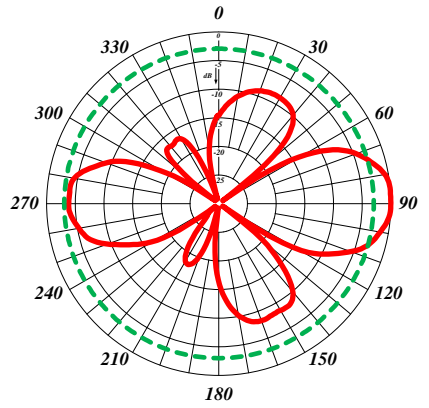
776-70



Quarter-wave Spacing Horizontal



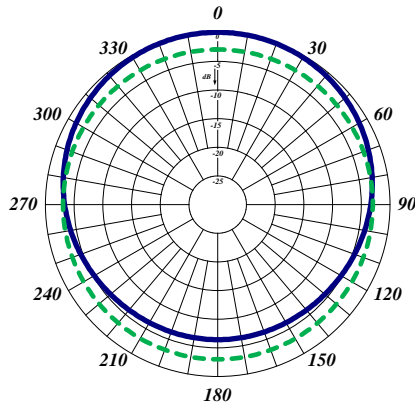
Half-wave Spacing Horizontal



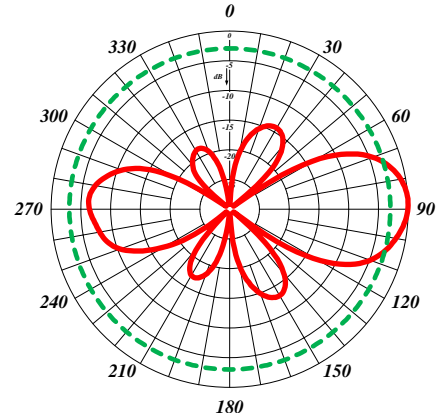
Half-wave Spacing Vertical



845-70



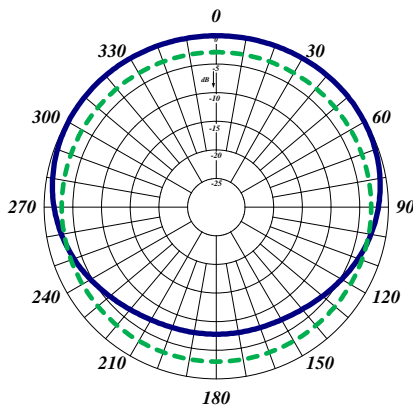
Horizontal Pattern



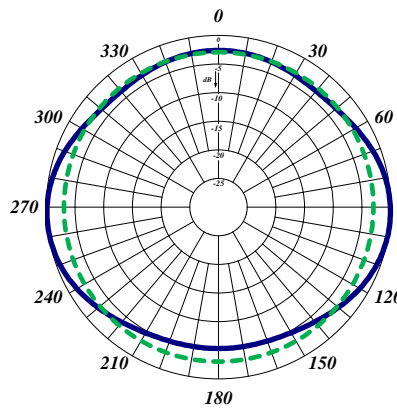
Vertical Pattern



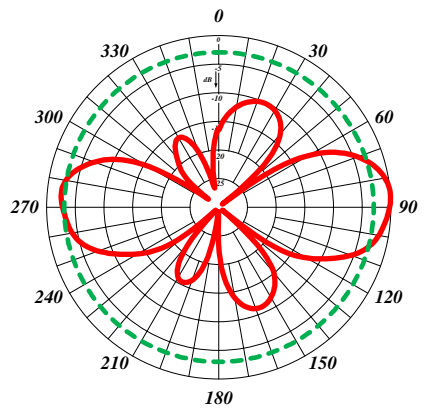
876F-70



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

Dual Antenna Array

The Dual Antenna Arrays are available in many different configurations. Our VHF, UHF, or 700/800/900 MHz antennas can be combined onto one mast. These antennas can be mixed and matched from our 870, 770 and 790 series antennas. All our antennas can be completely customized to your particular applications. Our antennas can be configured for top or side mount.

- A low VSWR version, with maximum gain over the specified frequencies.
- Ideal for applications where the costs are calculated per antenna.
- Heavy-duty versions are available.
- Multiple combinations are offered and customizable. Please contact our Technical Support team for consultation.

Electrical Specifications	F-3676		F-3661		F-3647	
Frequency Range, MHz	138-174	406-470	138-174	406-470	138-174	406-470
Nominal Gain, dBd	8.0-8.5	8.0-8.5	5.0-5.5	5.0-5.5	2.0-2.5	2.0-2.5
Number of Dipoles	4	4	2	2	1	1
Bandwidth 1.5:1 VSWR, MHz	36	64	36	106	36	106
Polarization	Vertical		Vertical		Vertical	
Pattern	Offset		Offset		Offset	
Power Rating, Watts	300		300		300	
Nominal Impedance, Ohms	50		50		50	
Lightning Protection	DC Ground		DC Ground		DC Ground	
Standard Termination	Type N Male		Type N Male		Type N Male	
Mechanical Specifications	F-3676		F-3661		F-3647	
Length, in (mm)	354 (8992)		186 (4724)		126 (3200)	
Width (1/2 Wave Spacing), in (mm)	41 (1041)		40 (1016)		40 (1016)	
Weight, lbs. (kg)	117 (53)		59 (26.8)		26 (11.9)	
Rated Wind Velocity, No Ice, mph (km/h)	110 (177)		150 (241)		170 (272)	
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)		110 (177)		140 (225)	
Lateral Thrust @ 100 mph, wind, lbs. (kg)	315 (143)		154 (70)		67 (30.5)	
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	2469 (341)		720 (100)		110 (15)	
Projected Area, ft ² (m ²)	12 (1.12)		5.7 (0.53)		2.5 (0.23)	
Mounting Information Mast O.D. (mm)	3.5" (89)		2.9" (73)		1.9" (48)	

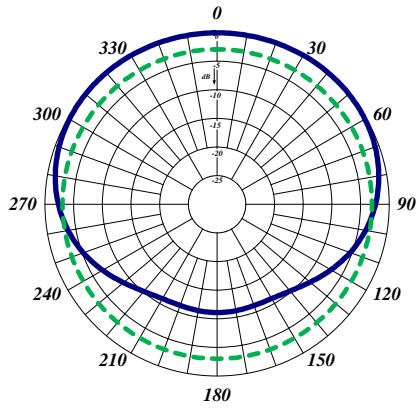


F-3661

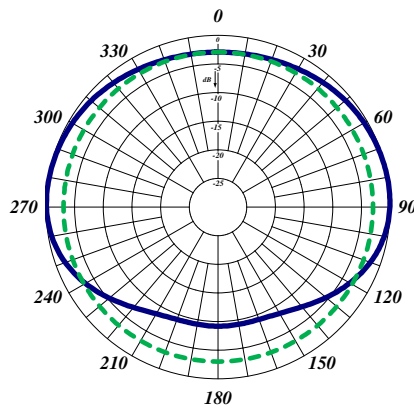
* See appendix for ordering information (page 229) *



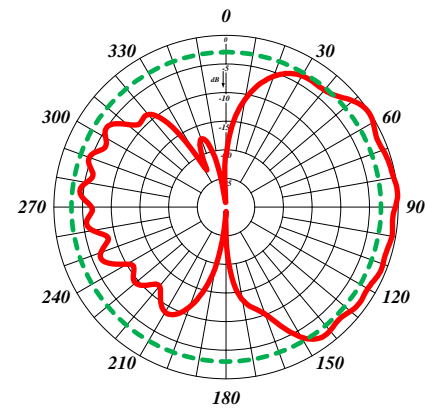
F-3647



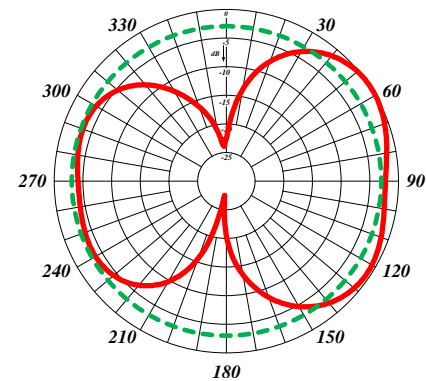
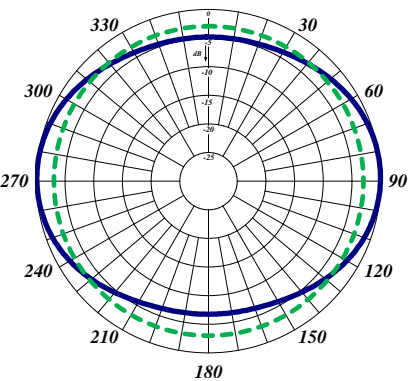
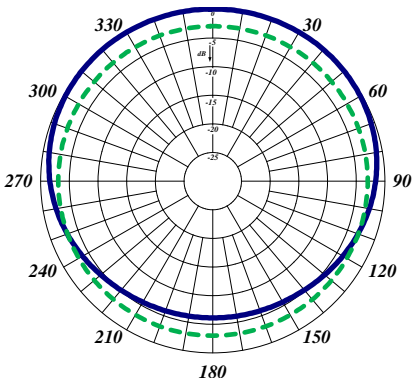
Quarter-wave Spacing Horizontal



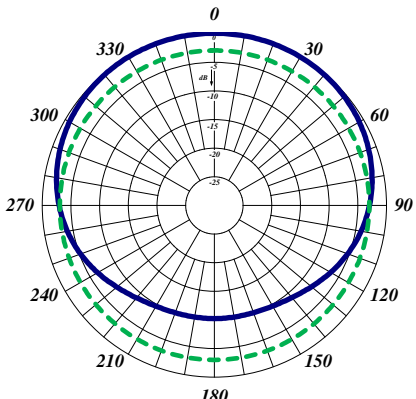
Half-wave Spacing Horizontal



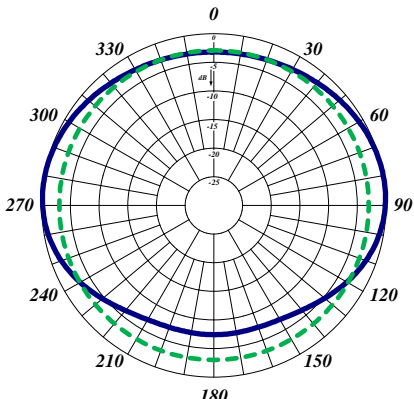
Half-wave Spacing Vertical



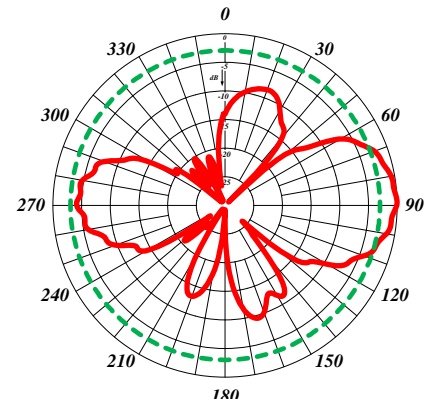
F-3661



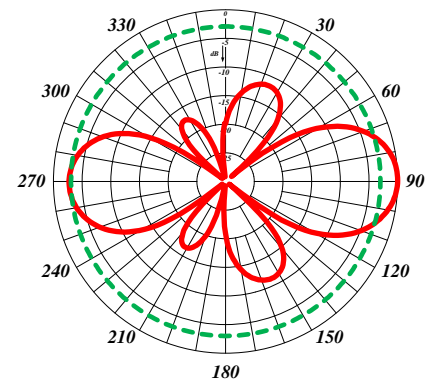
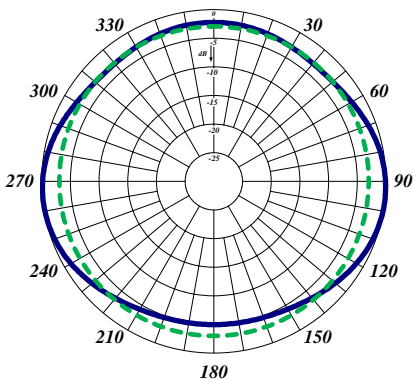
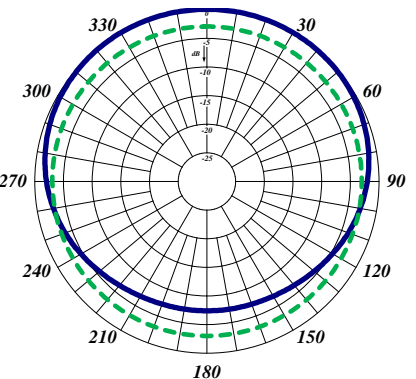
Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal

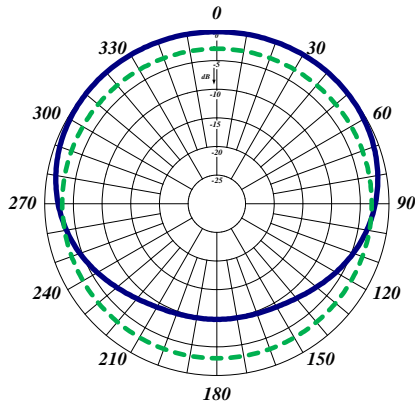


Half-wave Spacing Vertical

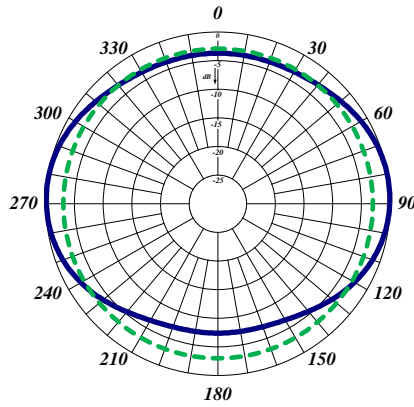




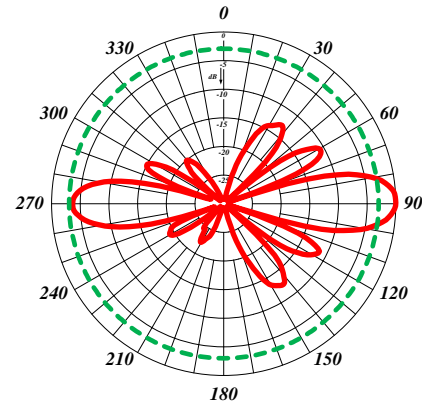
F-3676



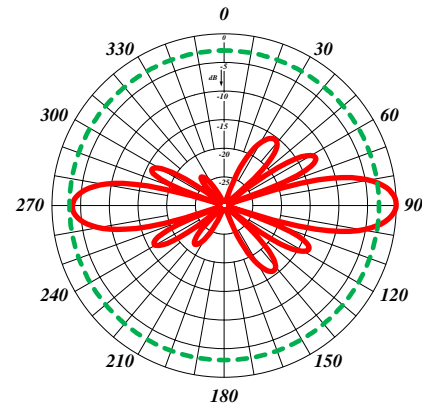
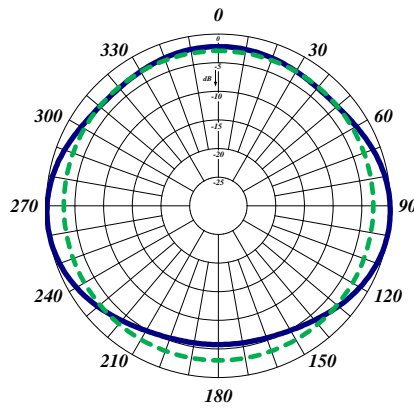
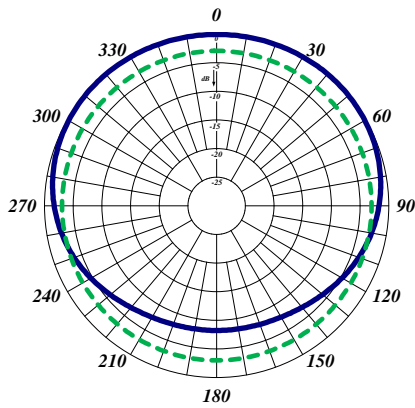
Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical



870 Series VHF Exposed Dipoles with Reflectors

The F-37XX Series antennas are our 870 Series VHF Exposed Dipoles with Reflectors. They are available in 1, 2, 4 dipole configurations. All our antennas can be completely customized to your applications. Our antennas can be black anodized, fully welded, side mount or top mount, and heavy-duty versions are available.

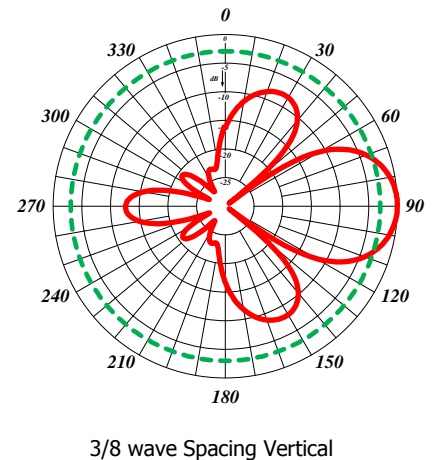
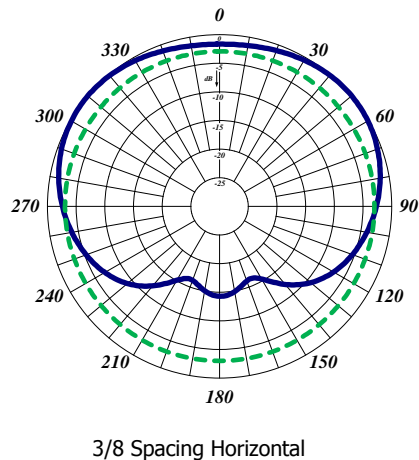
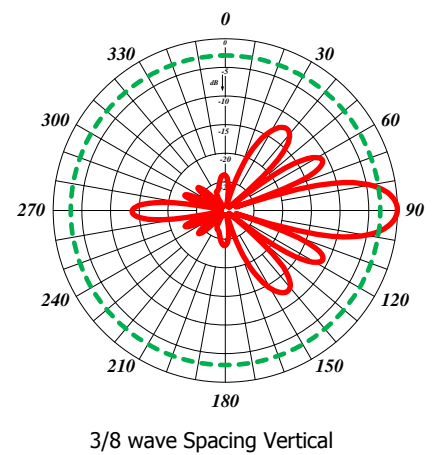
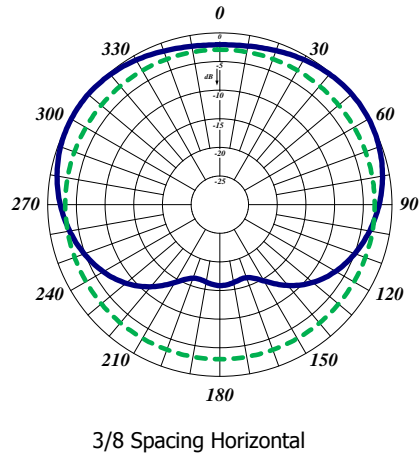
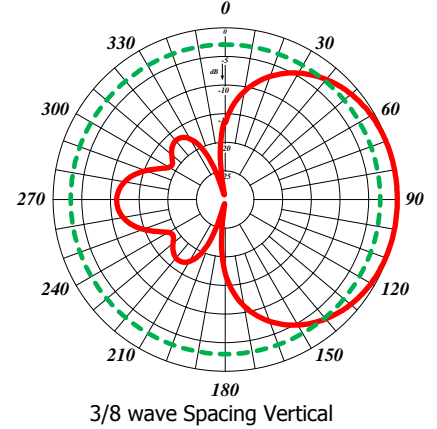
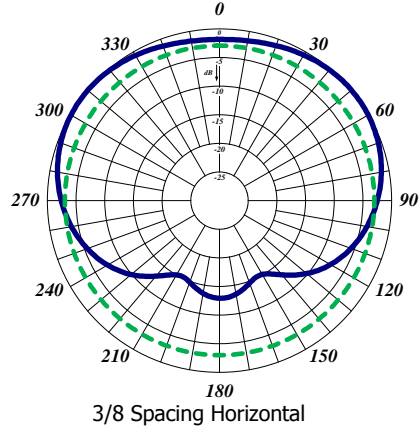
The Reflectors provide a higher degree of directivity. This product is ideal for state or country borders. We have seen great success with being able to shape the RF patterns in the 870-series antenna line.

- Each antenna is configured as a 3/8 wave version.
- The reflectors provide more directivity and greater front-to-back ratios.
- These exposed dipoles have internal cabling and fixed dipole to mast spacing.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	F-3729	F-3713	F-3766
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.5-3.0	7.0	9.0-10.0
Number of Dipoles	1	2	4
Number of Reflectors	6	6	6
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Directional	Directional	Directional
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	F-3729	F-3713	F-3766
Length, in (mm)	72 (1829)	120 (3048)	240 (6096)
Width (1/2 Wave Spacing), in (mm)	50 (1270)	53 (1346)	53 (1346)
Weight, lbs. (kg)	34.3 (15.6)	57.2 (26)	100.3 (45.5)
Mounting Information Mast O.D.	2.4" (61)	2.4" (61)	2.9" (73)
* See appendix for ordering information (page 229) *			



F-3713



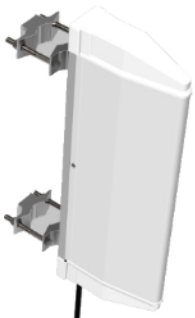
790 Series Enclosed Dipole

The 790 Series Enclosed Dipoles are available in 2, 4 or 8 dipole configurations. All our antennas can be completely customized to your particular applications.

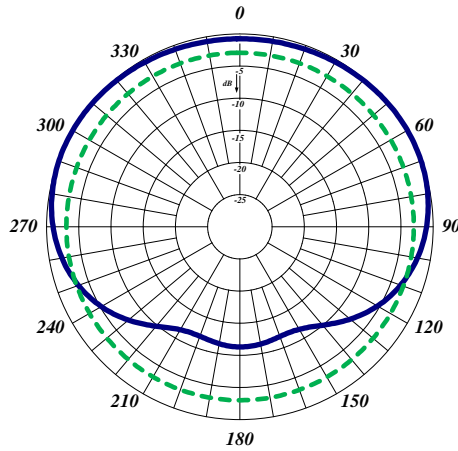
- Each antenna is offered in an offset pattern, 1/4 or 1/2 wave versions.
- Broadband antennas are ideal for trunking or cellular applications.
- Weatherproof radome to ensure continuous service during severe environmental conditions.
- Versions with 3, 6, and 9 degree downtilt are also available.

Electrical Specifications	792-70	794-70	799-70
Frequency Range, MHz	746-960	746-960	746-960
Nominal Gain, dBd	5.0	8.0	10.0
Number of Dipoles	2	4	8
Bandwidth 1.5:1 VSWR, MHz	150	150	150
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	150	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	792-70	794-70	799-70
Length, in (mm)	22 (559)	44.5 (1130)	94 (2388)
Width (1/2 Wave Spacing), in (mm)	2.5 (64)	2.5 (64)	2.5 (64)
Weight, lbs. (kg)	8.8 (4)	14 (6.5)	24 (11)
Rated Wind Velocity, No Ice, mph (km/h)	100 (162)	100 (162)	100 (162)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	36.4 (16.5)	73 (33)	153 (59)
Projected Area, ft ² (m ²)	1.4 (0.13)	2.7 (0.25)	5.7 (0.53)
Mounting Information	1.5-2.88" O.D.	1.5-2.88" O.D.	1.5-2.88" O.D.
* See appendix for ordering information (page 229) *			

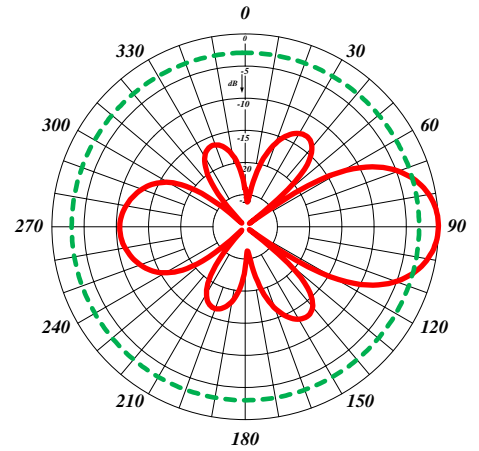




792-70



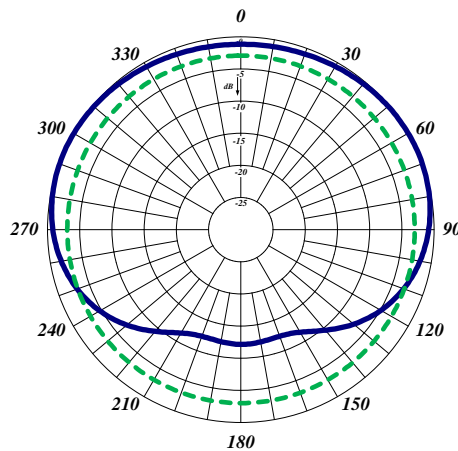
Half-wave Spacing Horizontal



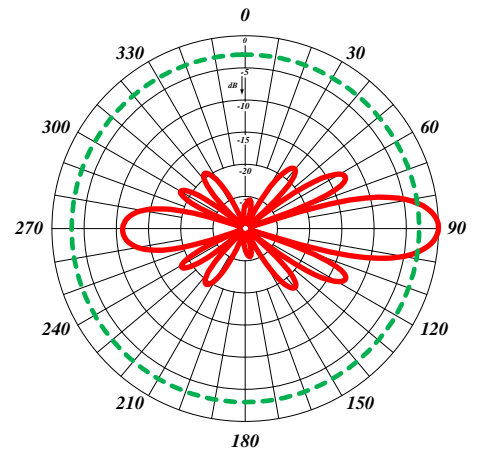
Half-wave Spacing Vertical



794-70



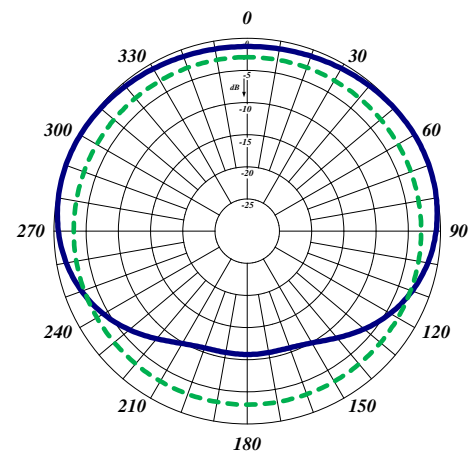
Half-wave Spacing Horizontal



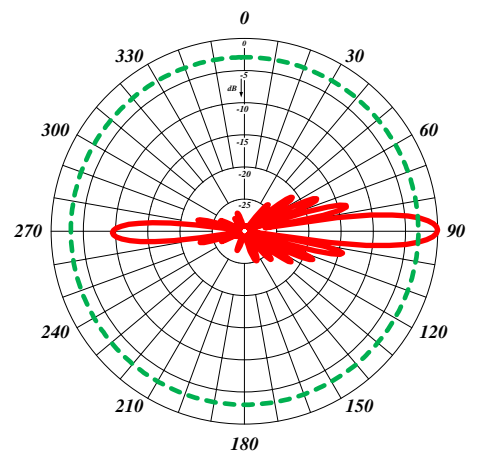
Half-wave Spacing Vertical



799-70



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

790 Series Enclosed Dipoles with Reflector

The 790 Series Enclosed Dipoles with Reflector are available in 2, 4, or 8 dipole configurations. These antennas can be adjusted from 60° to 160°. All our antennas can be completely customized to your particular applications.

- These antennas have 1/4 wave spacing to the reflector.
- Broadband antennas are ideal for trunking or cellular applications.
- Reflector is field adjustable and has 5 positions: 60°, 90°, 105°, 130° and 160°.
- Weatherproof radome to ensure continuous service during severe environmental conditions.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

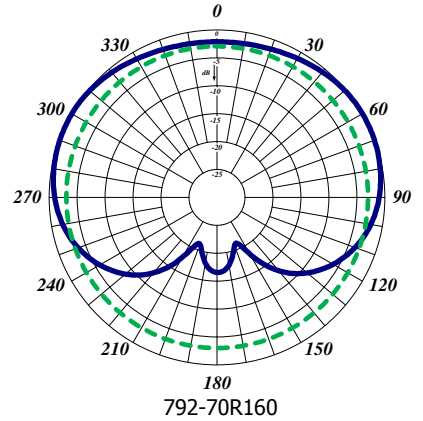
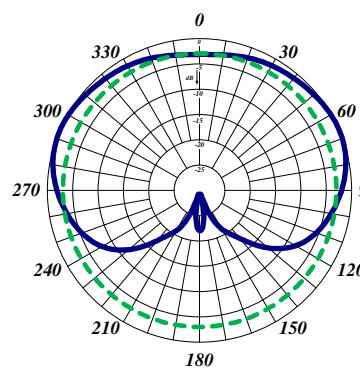
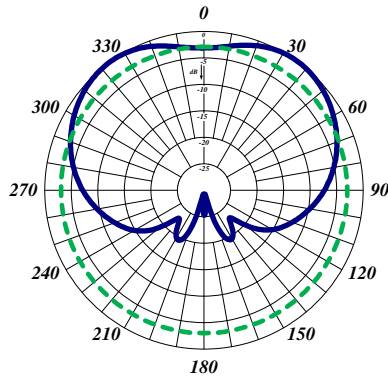
Electrical Specifications	792-70R	794-70R	799-70R
Frequency Range, MHz	746-960	746-960	746-960
Nominal Gain, dBd	Up to 8.0	Up to 13.5	Up to 15.0
Number of Dipoles	2	4	8
Bandwidth 1.5:1 VSWR, MHz	150	150	150
Polarization	Vertical	Vertical	Vertical
Pattern	Directional	Directional	Directional
Power Rating, Watts	150	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	792-70R	794-70R	799-70R
Length, in (mm)	22 (559)	44.5 (1130)	94.5 (2395)
Width (1/2 Wave Spacing), in (mm)	25 (635)	25 (635)	25 (635)
Weight, lbs. (kg)	16.5 (7.5)	24 (10.9)	42 (19)
Rated Wind Velocity, No Ice, mph (km/h)	100 (162)	100 (162)	100 (162)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	57(26)	115 (52)	243 (110)
Projected Area, ft² (m²)	2.0 (0.19)	4.3 (0.40)	9 (0.84)
Mounting Information	1.5-2.88" O.D.	1.5-2.88" O.D.	1.5-2.88" O.D.
* See appendix for ordering information (page 230) *			



794-70R



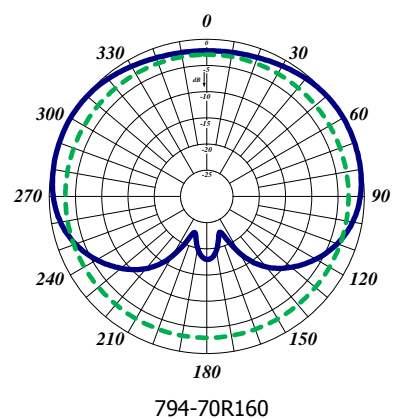
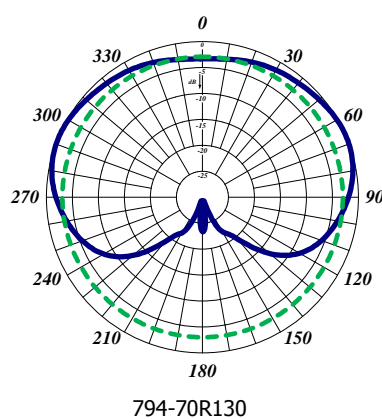
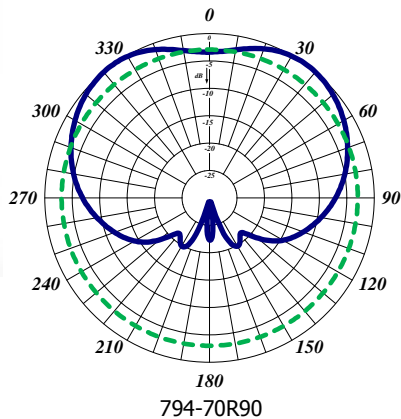
792-70R



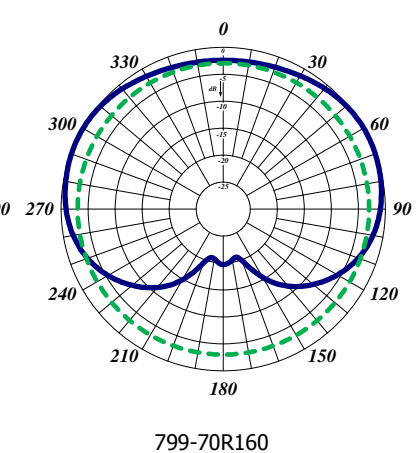
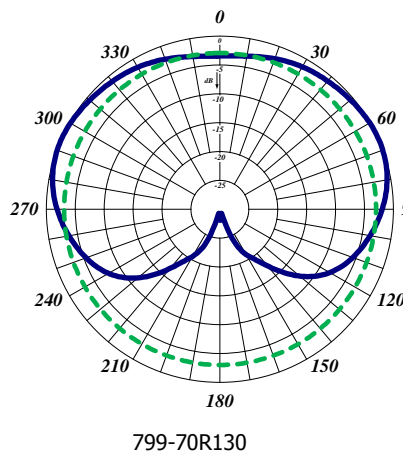
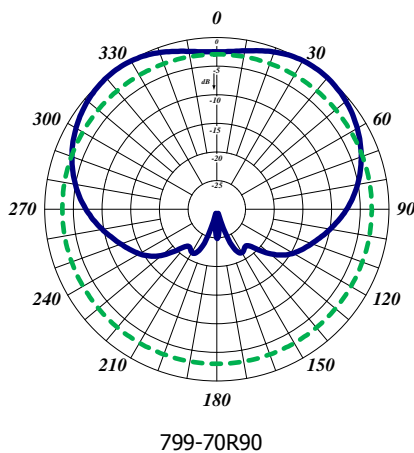
Call for additional patterns



794-70R



799-70R



290 Series VHF Yagi Antennas

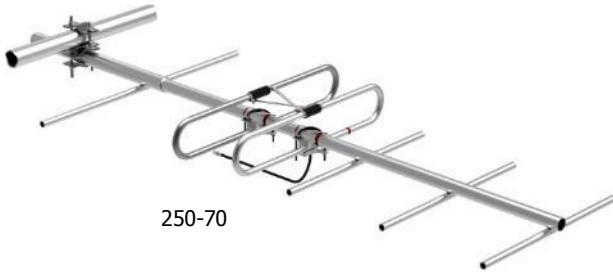
The 290 Series VHF Yagi Antenna are available in 2, 3, and 6 element configurations. All our antennas can be completely customized to your applications. Our antennas can be black anodized, welded, vertically or horizontally polarized, and heavy-duty versions are available.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Optionally have the entire antenna welded for added durability.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	291-70	295-70	290-70	250-70
Frequency Range, MHz	138-174	138-174	138-174	138-174
Nominal Gain, dBd	3.5	6.5	9.5	7
Number of Elements	2	3	6	7
Bandwidth 2.0:1 VSWR, MHz (Ctr. Freq.%)	36	4%	4%	36
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	140°	90°	62°	80°
Vertical Beamwidth (Horizontal Pol.)	70°	61°	50°	60°
Front to Back, dB	15	12	17	25
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	350	350	350	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	291-70	295-70	290-70	250-70
Length, in (mm)	50 (1270)	60 (1524)	108 (2743)	104 (2642)
Width (1/2 Wave Spacing), in (mm)	40 (1016)	43 (1092)	42 (1067)	42 (1067)
Weight, lbs. (kg)	4.8 (2.2)	6.5 (2.9)	12.0 (5.4)	12.0 (5.4)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	145 (223)	120 (177)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	100 (161)	85 (137)	90 (145)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	29 (13)	39 (18)	65 (29)	95 (43)
Projected Area, ft² (m²)	1.1 (0.10)	1.4 (0.13)	2.4 (0.22)	2.6 (0.24)
Mounting Hardware Included	181-85 Clamp	181-85 Clamp	115-85 Clamp	115-85 Clamp

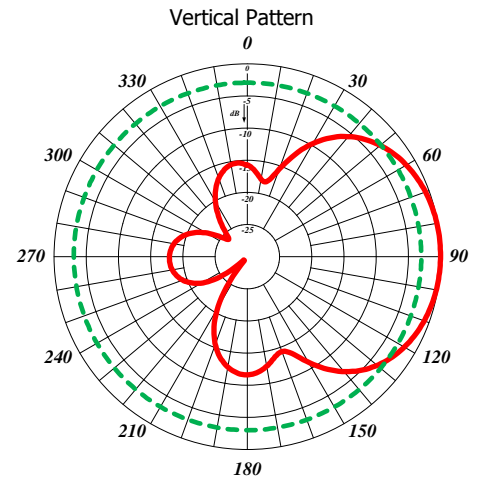
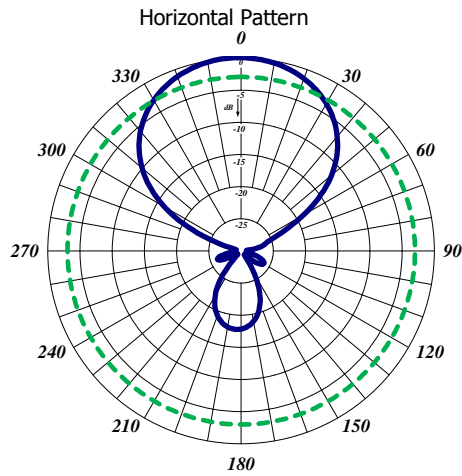
* See appendix for ordering information (page 230) *





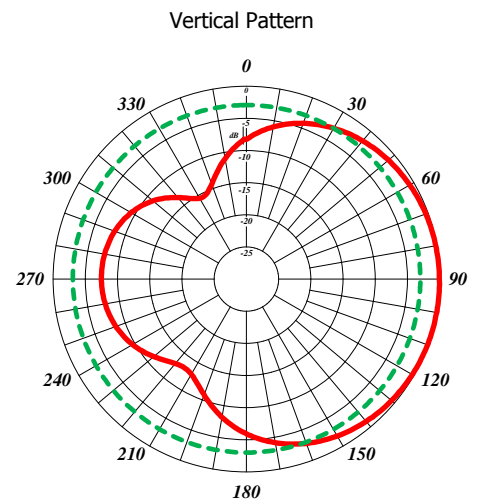
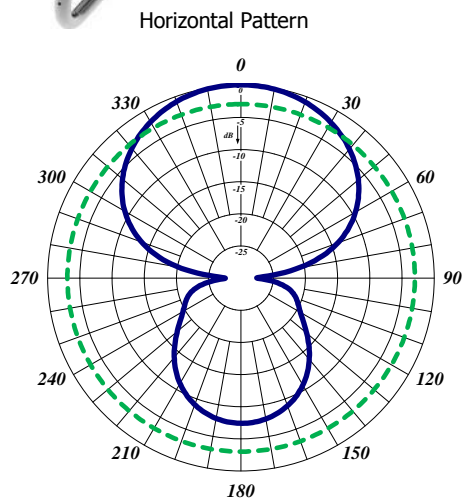
250-70

Horizontal Polarization



291-70

Horizontal Polarization

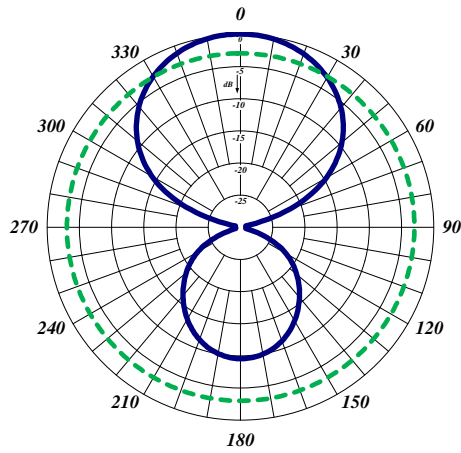




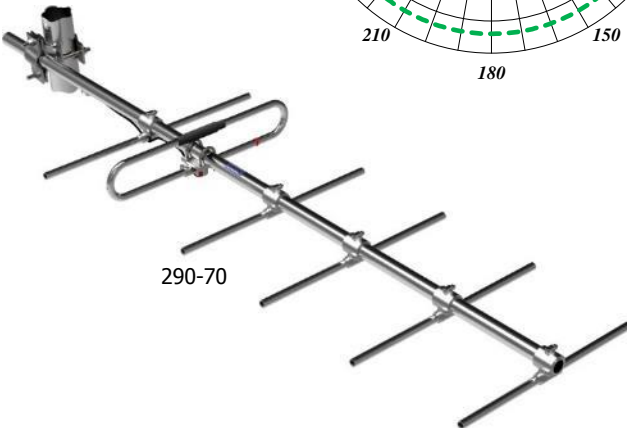
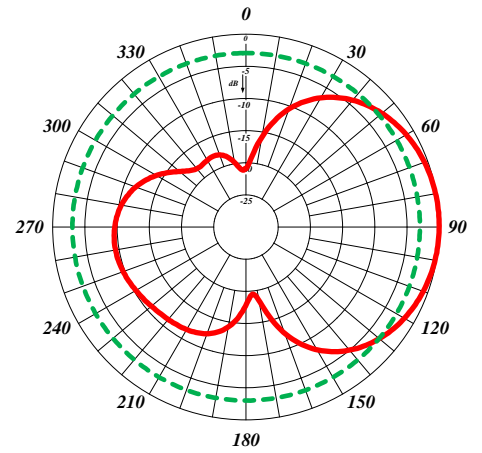
295-70

Horizontal Polarization

Horizontal Pattern



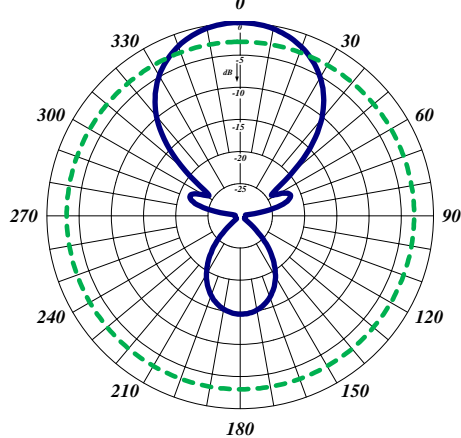
Vertical Pattern



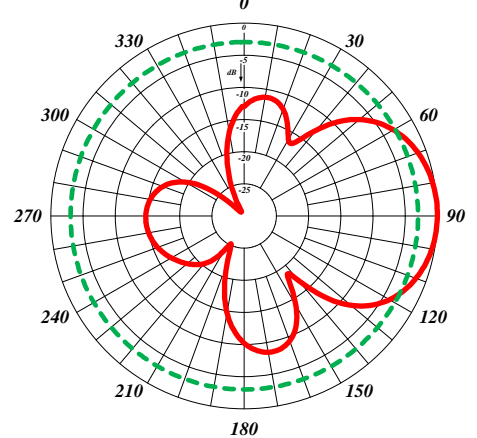
290-70

Horizontal Polarization

Horizontal Pattern



Vertical Pattern



290 Series 220MHz Yagi Antennas

The 290 Series 220MHz Yagi Antennas are available in 2, 3, and 6 element configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, welded, vertically or horizontally polarized, and heavy-duty versions are available.

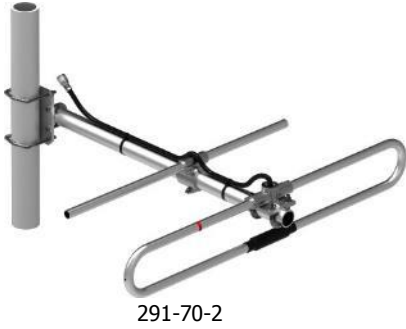
- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Option to have the entire antenna welded for added durability.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	291-70-2	295-70-2	290-70-2
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	3.5	6.5	9.5
Number of Elements	2	3	6
Bandwidth 1.5:1 VSWR, MHz (Center Freq.%)	10	10	10
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	140°	90°	62°
Vertical Beamwidth (Horizontal Pol.)	70°	36°	50°
Front to Back, dB	15	12	17
Pattern	Directional	Directional	Directional
Power Rating, Watts	350	350	350
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	291-70-2	295-70-2	290-70-2
Length, in (mm)	32 (813)	48 (1219)	84 (2134)
Width (1/2 Wave Spacing), in (mm)	29 (737)	28 (711)	27 (686)
Weight, lbs. (kg)	3.7 (1.7)	4.8 (2.2)	9.0 (4.1)
Rated Wind Velocity, No Ice, mph (km/h)	165 (266)	155 (249)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	145 (233)	130 (209)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	19.4 (8.8)	27 (12)	47 (21.3)
Torsional Moment @ 100 mph, ft.*lb (kg*m)	25 (3.5)	52 (7.2)	138 (19)
Projected Area, ft ² (m ²)	0.7 (0.07)	1.0 (0.09)	1.75 (0.16)
Mounting Hardware Included	181-85 Clamp	181-85 Clamp	115R-85 Clamp

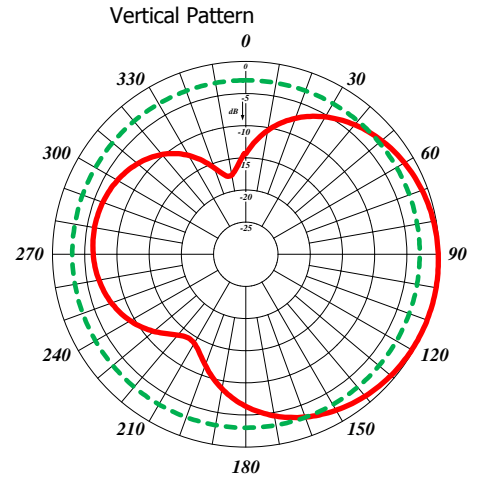
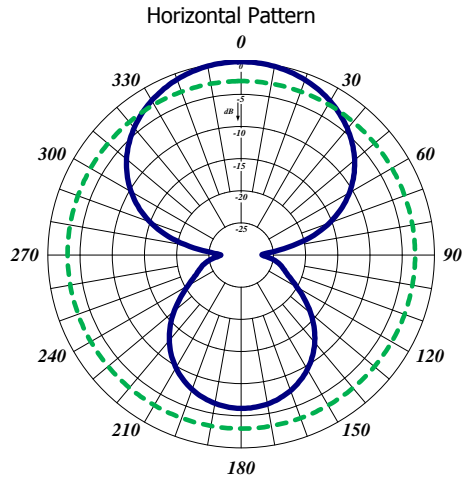
* See appendix for ordering information (page 230) *



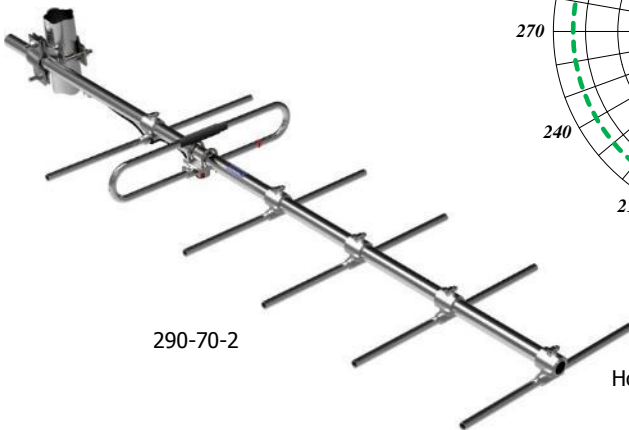
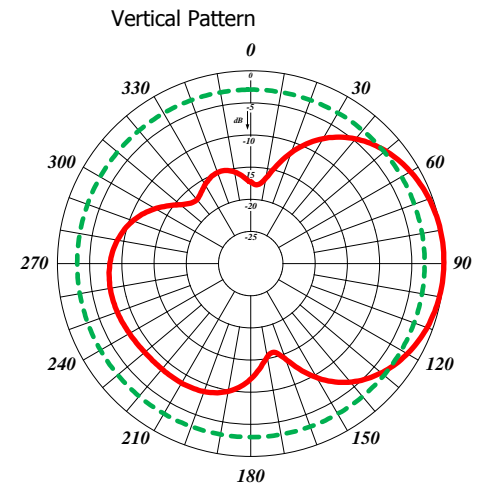
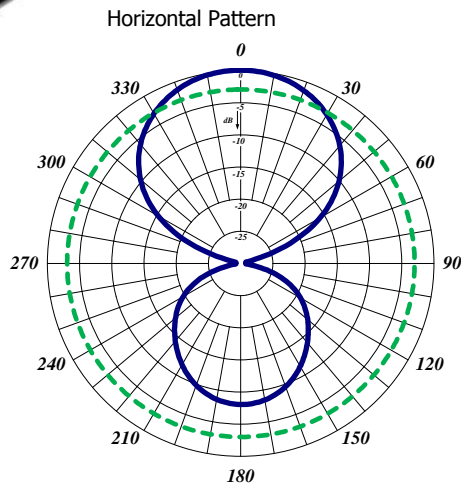
290-70-2



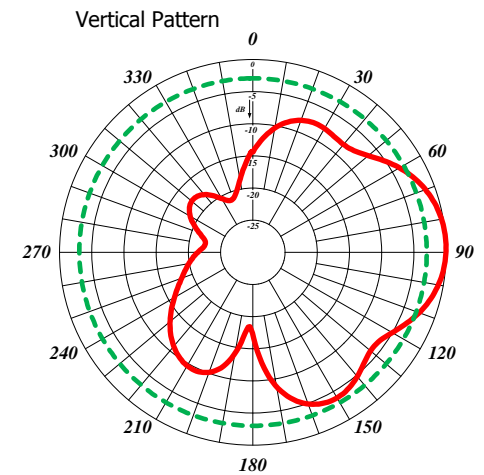
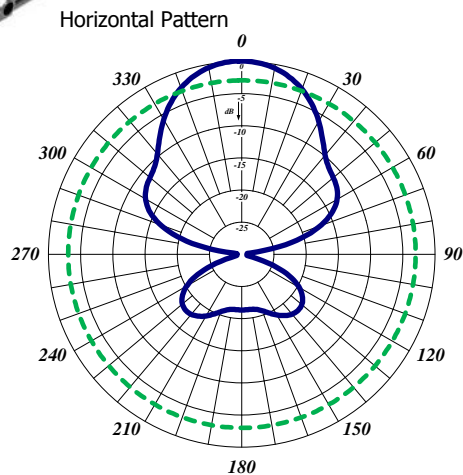
Horizontal Polarization



Horizontal Polarization



Horizontal Polarization



UHF Yagi Antennas Series

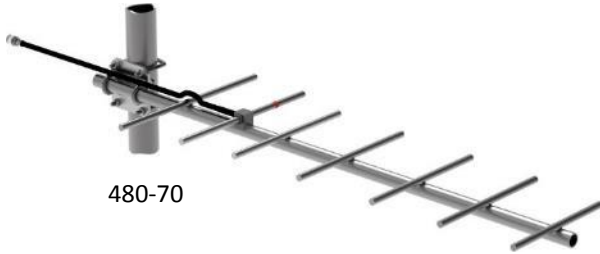
The UHF Yagi Antenna Series is available in 2, 3, 7 elements and our 70 MHz wideband configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, fully welded, vertically or horizontally polarized, and heavy-duty versions are available.

- Each antenna has a rugged, fully welded design to withstand harsh environmental conditions.
- The mounting hardware supplied allows either vertical or horizontal polarization.
- DC ground for lightning protection.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	F-3872	433-70	430-70	480-70
Frequency Range, MHz	406-512	406-512	406-512	406-470
Nominal Gain, dBd	3.5	6.5	10.0	10.0
Number of Elements	2	3	7	7
Bandwidth 1.5:1 VSWR, MHz (Center Freq.%)	24	24	24	64
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	138°	83°	62°	62°
Vertical Beamwidth (Vert. Pol.)	72°	59°	48°	50°
Front to Back, dB	10	12	20	17
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	350	350	350	350
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	F-3872	433-70	430-70	480-70
Length, in (mm)	28 (711)	23 (584)	45 (1143)	45 (1143)
Width (1/2 Wave Spacing), in (mm)	14.5 (368)	14 (355)	14.5 (368)	14.4 (366)
Weight, lbs. (kg)	2.8 (1.3)	2.9 (1.3)	3.9 (1.8)	3.9 (1.8)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	160 (257)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	120 (193)	120 (193)	110 (177)	110 (177)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	9 (4.1)	8.7 (4.0)	16 (7.3)	15 (6.8)
Projected Area, ft ² (m ²)	0.34 (0.03)	0.32 (0.03)	0.61 (0.06)	0.55 (0.05)
Mounting Hardware Included	127-85 Clamp	127-85 Clamp	127-85 Clamp	127-85 Clamp

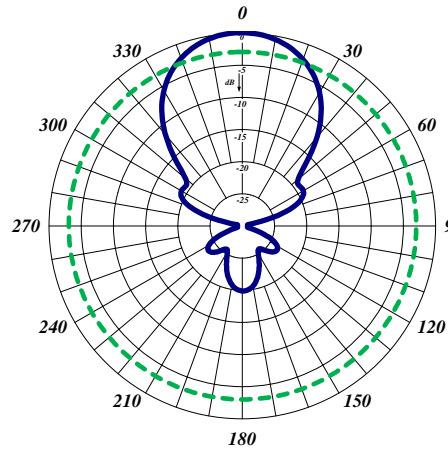


* See appendix for ordering information (page 230) *



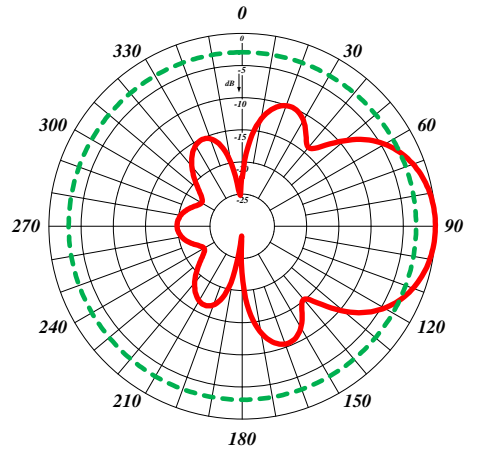
480-70

Horizontal Pattern



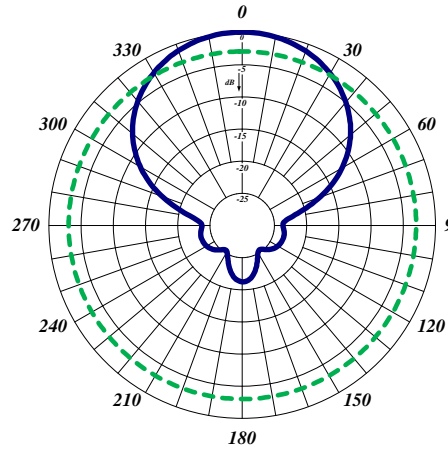
Horizontal Polarization

Vertical Pattern



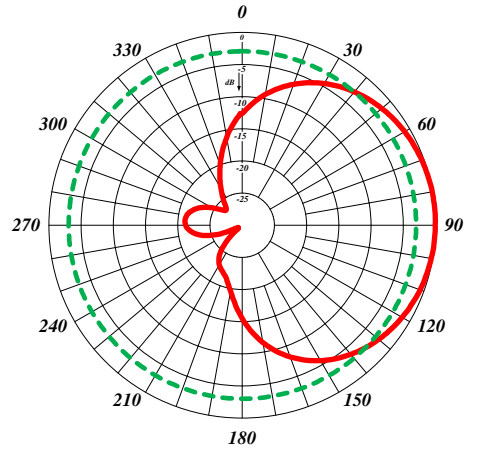
433-70

Horizontal Pattern



Horizontal Polarization

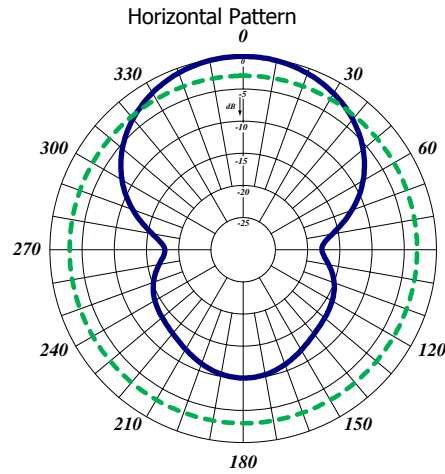
Vertical Pattern



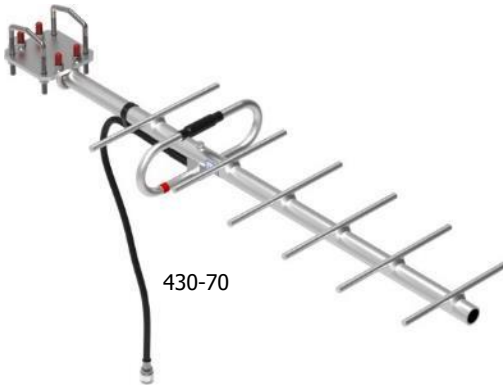
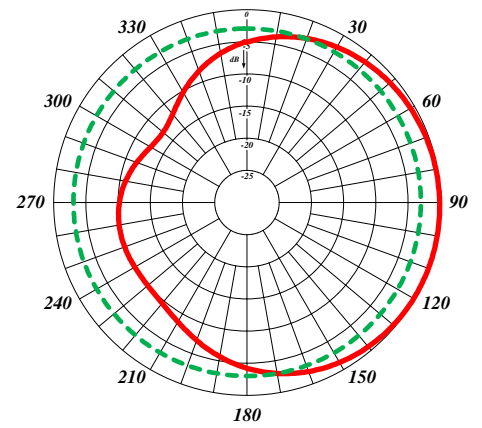


F-3872

Horizontal Polarization

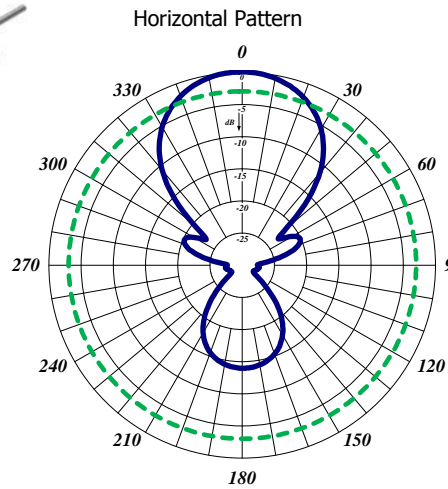


Vertical Pattern

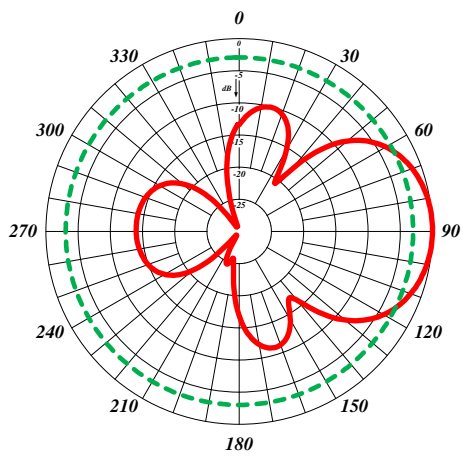


430-70

Horizontal Polarization



Vertical Pattern



980 Yagi Antennas Series

The 980 Yagi Antenna Series are available in 2, 3, 7, 12 element configurations. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, vertically or horizontally polarized.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- All 980 Series Yagi antennas are fully welded.
- Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	982-70	983-70	980-70	987-70
Frequency Range, MHz	900-930	746-960	746-960	746-960
Nominal Gain, dBd	3.5	6.5	10.0	12.0
Number of Elements	2	3	7	12
Bandwidth 1.5:1 VSWR, MHz (Ctr. Freq.%)	30	85	85	85
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	128°	99°	56°	41°
Vertical Beamwidth (Horizontal Pol.)	66°	60°	42°	38°
Front to Back, dB	9	16	20	20
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	982-70	983-70	980-70	987-70
Length, in (mm)	11 (280)	13 (330)	27 (686)	41 (1041)
Width (1/2 Wave Spacing), in (mm)	6.5 (165)	8 (203)	8 (203)	8 (203)
Weight, lbs. (kg)	1.7 (0.76)	1.8 (0.82)	2.5 (1.1)	3 (1.4)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	160 (257)	150 (241)	140 (225)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	120 (193)	120 (193)	110 (177)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs.(kg)	2.6 (1.2)	2.8 (1.3)	7 (3.2)	11 (5.0)
Projected Area, ft ² (m ²)	0.10	0.13	0.26	0.41
Mounting Hardware Included	127-85 Clamp	127-85 Clamp	127-85 Clamp	127-85 Clamp



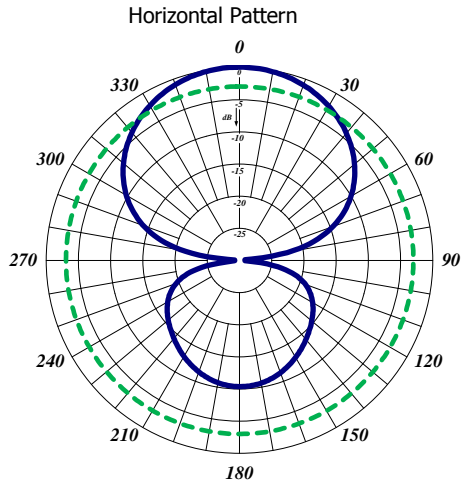
983-70

* See appendix for ordering information (page 231) *

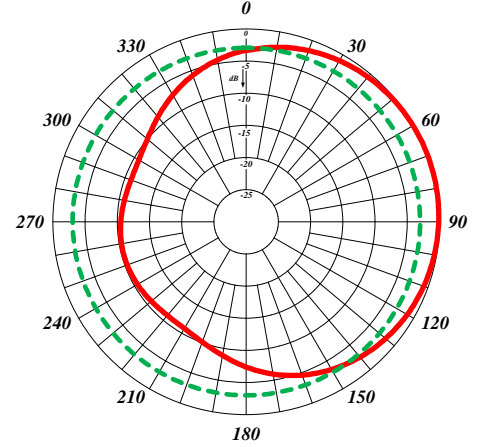


982-70

Horizontal Polarization

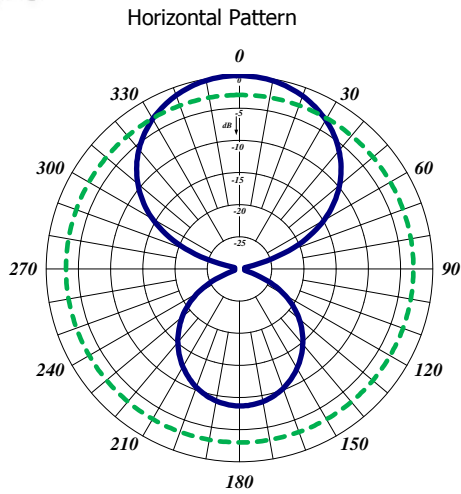


Vertical Pattern

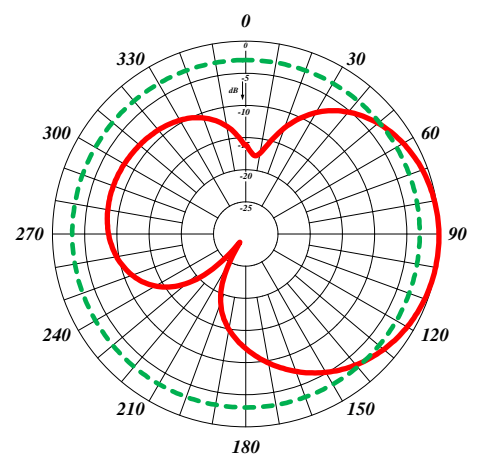


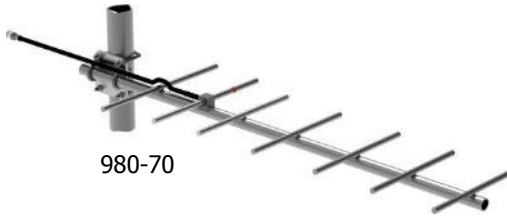
983-70

Horizontal Polarization

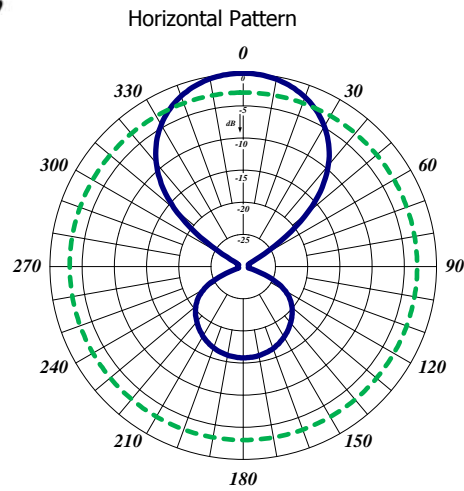


Vertical Pattern

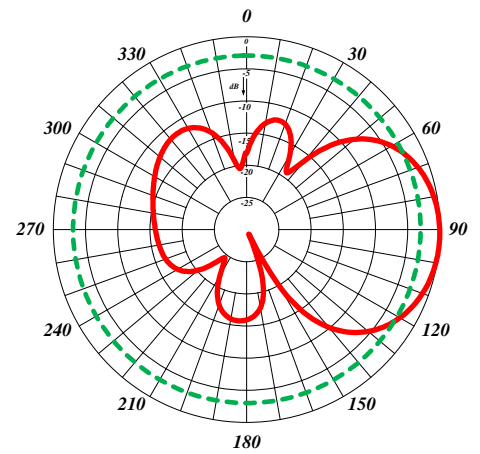




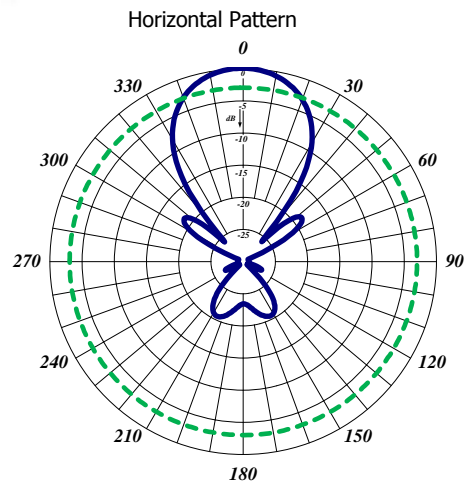
Horizontal Polarization



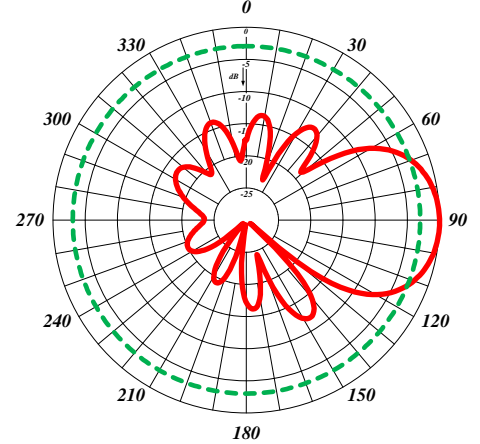
Vertical Pattern



Horizontal Polarization



Vertical Pattern



490 Heavy-duty Yagi Antennas Series

The 490 Heavy-duty Yagi Series is an extremely rugged, 7 elements configuration antenna. All our antennas can be completely customized to your particular applications. Our antennas can be black anodized, vertically or horizontally polarized.

- Each antenna has an extremely rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- The 490 Series Yagi antennas are fully welded.
- DC ground for lightning protection.

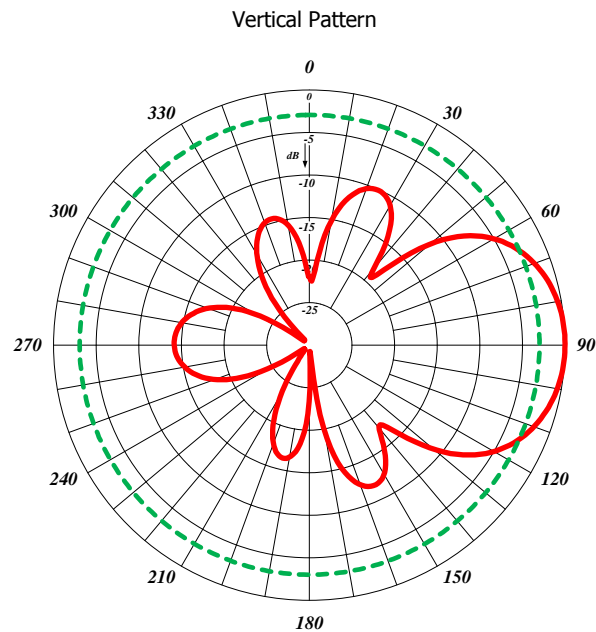
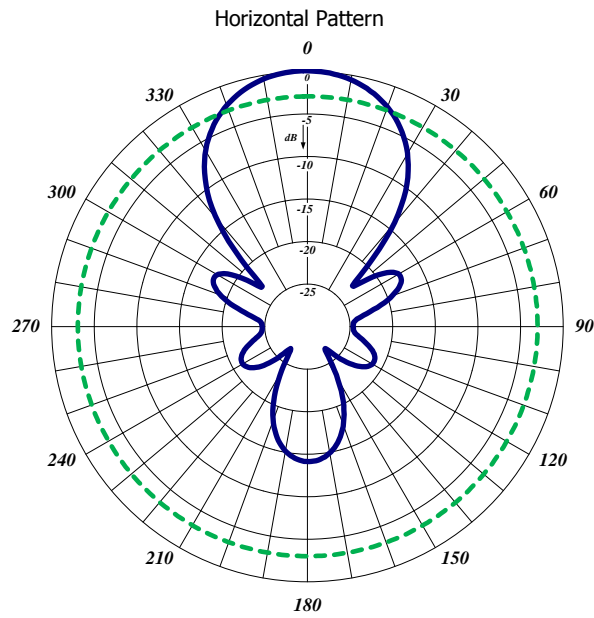


Electrical Specifications	490-70
Frequency Range, MHz	806-960
Nominal Gain, dBd	10.0
Number of Elements	7
Bandwidth: 1.5:1 VSWR, MHz	85
Polarization	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	56°
Vertical Beamwidth (Horizontal Pol.)	42°
Front to Back, dB	20
Pattern	Directional
Power Rating, Watts	200
Nominal Impedance, Ohms	50
Standard Termination	Type N Male
Mechanical Specifications	490-70
Length, in (mm)	27 (686)
Width (1/2 Wave Spacing), in (mm)	8 (203)
Weight, lbs. (kg)	2.5 (1.1)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	150 (241)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	38 (17)
Bending Moment @ top clamp: 100 mph, ft.*lb (kg*m)	13 (1.8)
Projected Area, ft ² (m ²)	0.4 (0.04)
Mounting Hardware Included	127-85
* See appendix for ordering information (page 231) *	



490-70

Horizontal Polarization



Radome Yagi Antennas Series

The Radome Yagi Antenna Series are available in UHF and 700/800/900 MHz configurations. The UHF model is offered with a Fiberglass or PVC Radome. The 700/800/900 MHz model is offered in PVC. All our antennas can be completely customized to your particular applications.

- Each antenna has a rugged design to withstand extreme environmental conditions.
- The mounting hardware supplied supports either vertical or horizontal polarization.
- DC ground for lightning protection.
- The PVC enclosure is 1/2 inch thick.
- These are our Heavy-Duty Versions. Please contact our Technical Support team for consultation.

Electrical Specifications	425-70	426-70	490-70R
Frequency Range, MHz	406-512	406-512	746-960
Nominal Gain, dBd	10	10	10
Number of Elements	Loop Yagi	Loop Yagi	7
Bandwidth: 1.5:1 VSWR, MHz	20	20	72
Polarization	Vert. or	Vert. or	Vert. or
Horizontal Beamwidth (Horizontal Pol.)	62°	62°	56°
Vertical Beamwidth (Horizontal Pol.)	48°	48°	42°
Front to Back, dB	20	20	20
Pattern	Directional	Directional	Directional
Power Rating, Watts	250	250	150
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	425-70	426-70	490-70R
Length, in (mm)	31 (787)	30 (762)	29 (737)
Width (1/2 Wave Spacing), in (mm)	16 (406)	16 (406)	14 (356)
Weight, lbs. (kg)	44 (20)	19 (8.6)	28 (12)
Radome Material	PVC	Fiberglass	PVC
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	120 (193)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	110 (177)	115 (185)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	69 (31.3)	61 (27.7)	47.4 (21.5)
Projected Area, ft ² (m ²)	2.6 (0.24)	2.3 (0.21)	1.8 (0.17)
Mounting Hardware Included	173-85 clamp	173-85 clamp	173-85 clamp



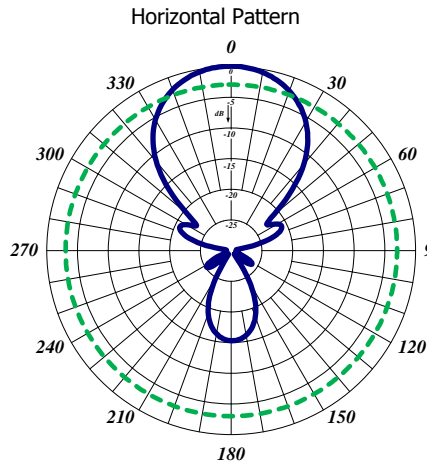
490-70R

* See appendix for ordering information (page 231) *

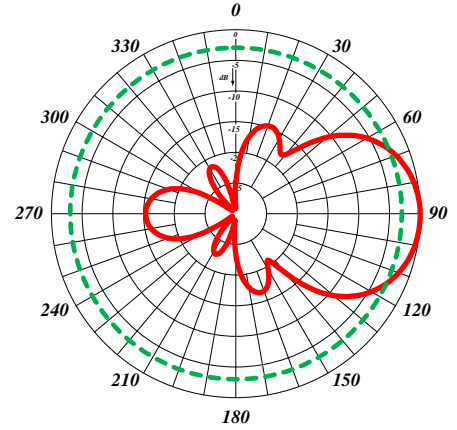


425-70

Horizontal Polarization

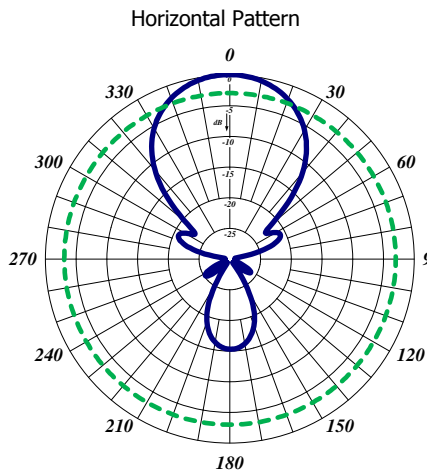


Vertical Pattern

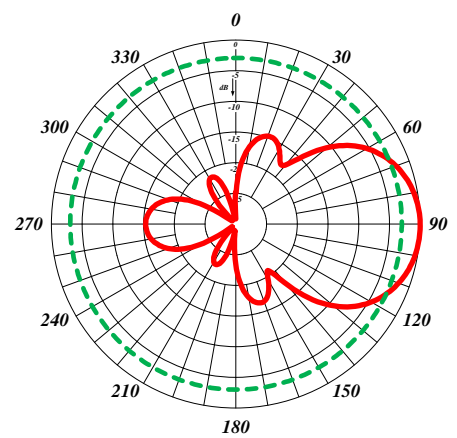


426-70

Horizontal Polarization

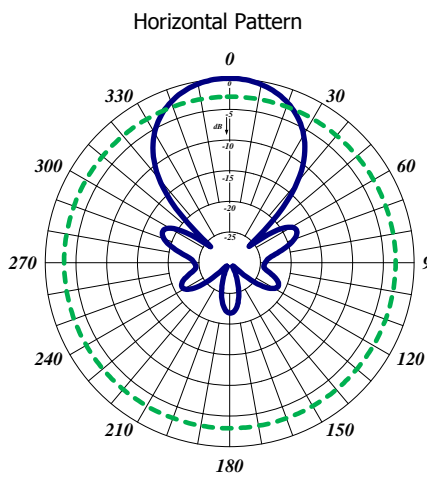


Vertical Pattern

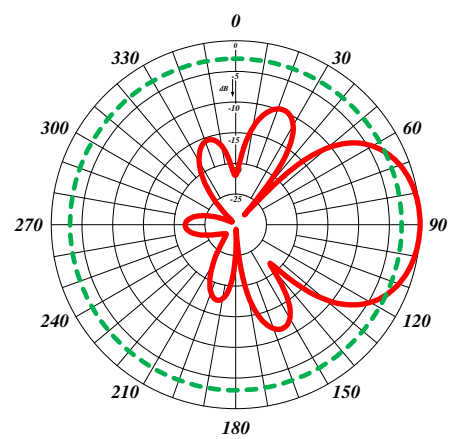


490-70R

Horizontal Polarization



Vertical Pattern



VHF Corner Reflector Antenna Series

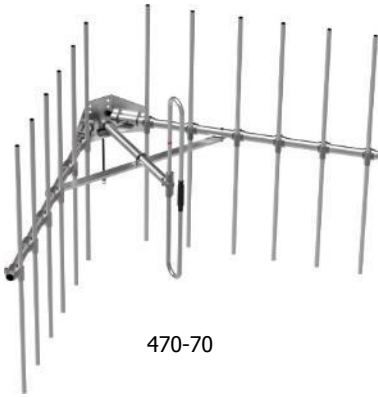
The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have a very high front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single dipole mounted in the front of a 90° reflector, providing good directivity
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" of radial ice.
- The mounting hardware supplied allows either vertical or horizontal polarization. DC ground for lightning protection. Heavy-duty versions are available. Please contact our Technical Support team for consultation.

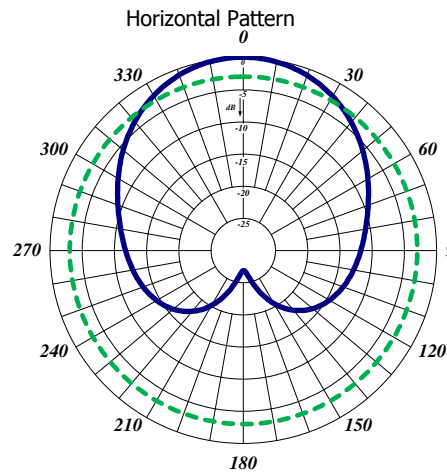
Electrical Specifications	470-70	470-70HD	471-70	471-70HD
Frequency Range, MHz	138-174	138-174	138-174	138-174
Nominal Gain, dBd	7.0	7.0	10.0	10.0
Bandwidth: 1.5:1 VSWR, MHz	36	36	36	36
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	67°	67°	50°	50°
Vertical Beamwidth (Vert. Pol.)	75°	75°	66°	66°
Front to Back, dB	30	30	30	30
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	250	250	250	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	470-70	470-70HD	471-70	471-70HD
Length, in (mm)	48 (1219)	48 (1219)	72 (1829)	72 (1829)
Width, in (mm)	75 (1905)	75 (1905)	120 (3048)	120 (3048)
Weight, lbs. (kg)	39 (17.7)	57 (25.8)	66 (30)	72 (32.7)
Rated Wind Velocity, No Ice, mph (km/h)	100 (61)	140 (225)	100 (61)	140 (225)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	100 (161)	85 (137)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	144 (65)	236 (107)	320 (145)	398 (181)
Projected Area, ft ² (m ²)	5.3 (0.5)	8.8 (0.82)	11.9 (1.10)	14.8 (1.38)
Mounting Hardware Included	173-85 Clamp	173-85 Clamp	173-85 Clamp	173-85 Clamp



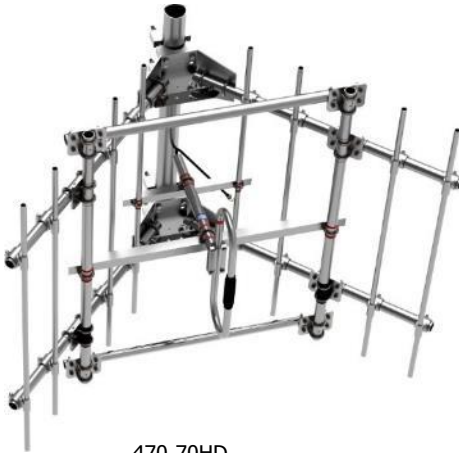
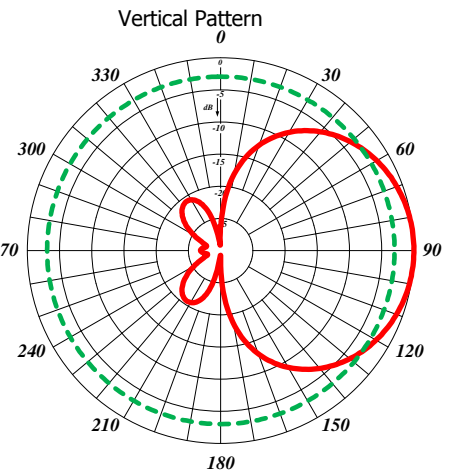
470-70HD



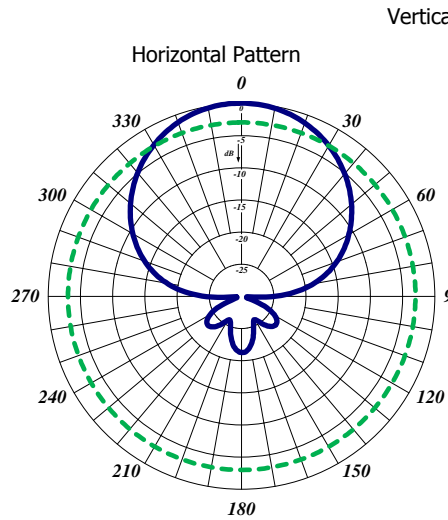
470-70



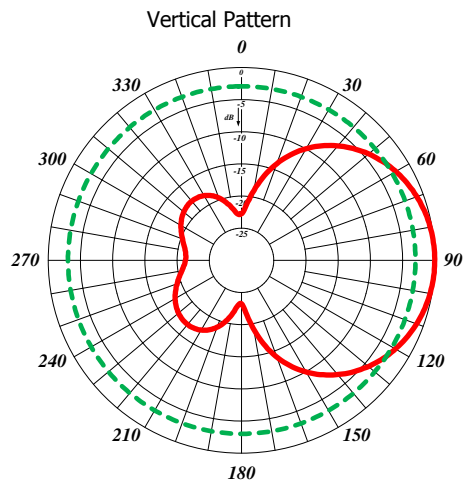
Vertical Polarization

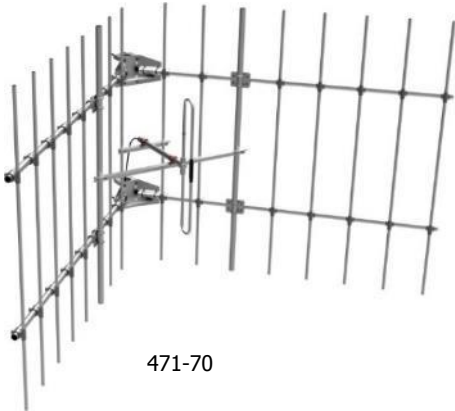


470-70HD



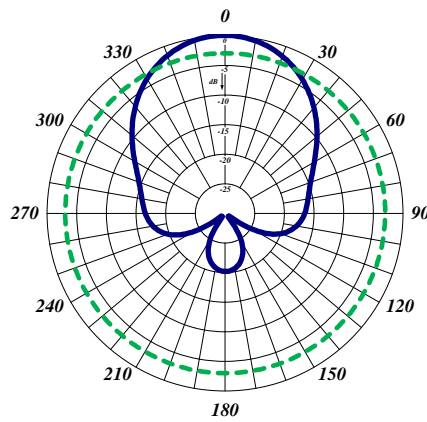
Vertical Polarization





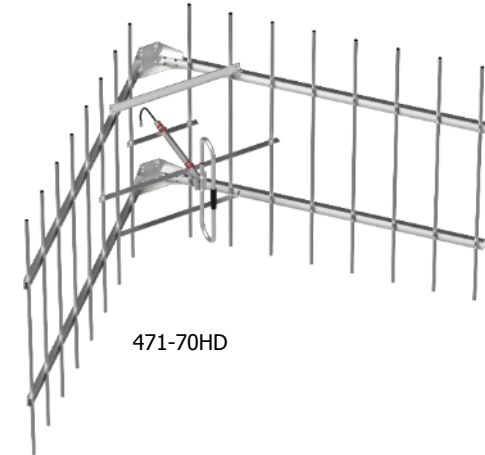
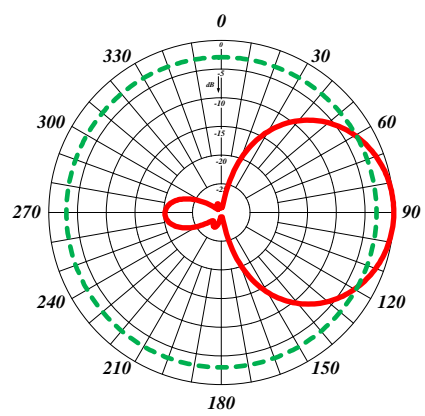
471-70

Horizontal Pattern



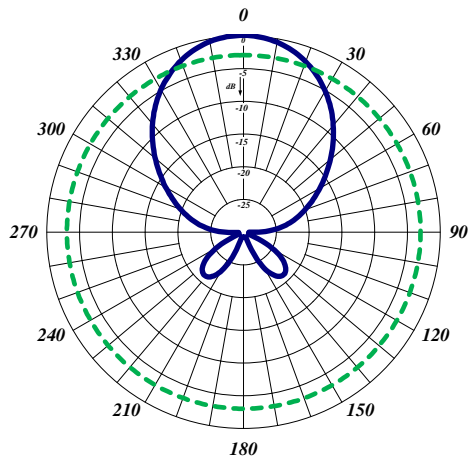
Vertical Polarization

Vertical Pattern



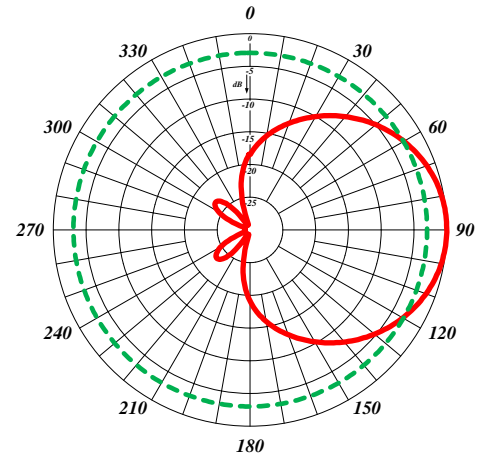
471-70HD

Horizontal Pattern



Vertical Polarization

Vertical Pattern



220MHz Corner Reflector Antenna Series

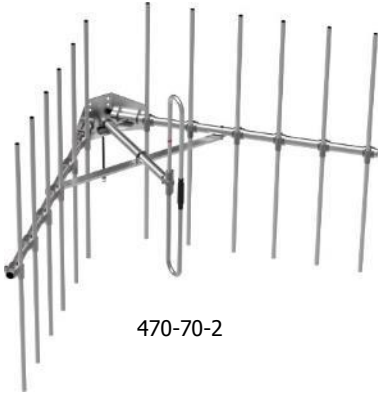
The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have a very high front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single or Dual Dipole mounted in the front of a 90° reflector, providing good directivity.
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" of radial ice.
- The supplied mounting hardware allows either vertical or horizontal polarization. DC ground for lightning protection. Heavy-duty versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	470-70-2	470-70-2HD	471-70-2
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	7.0	7.0	10.0
Bandwidth: 1.5:1 VSWR, MHz	10	10	10
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	67°	67°	50°
Vertical Beamwidth (Vert. Pol.)	75°	75°	66°
Front to Back, dB	30	30	30
Pattern	Directional	Directional	Directional
Power Rating, Watts	250	250	250
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	470-70-2	470-70-2HD	471-70-2
Length, in (mm)	48 (1219)	48 (1219)	72 (1829)
Width, in (mm)	75 (1905)	75 (1905)	120 (3048)
Weight, lbs. (kg)	39 (17.7)	57 (25.8)	55 (30)
Rated Wind Velocity, No Ice, mph (km/h)	100 (161)	140 (225)	100 (161)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	100 (161)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	144 (65)	236 (107)	320 (145)
Projected Area, ft ² (m ²)	5.3 (0.5)	8.8 (0.82)	11.9 (1.10)
Mounting Hardware Included	172-85 Clamp	172-85 Clamp	172-85 Clamp

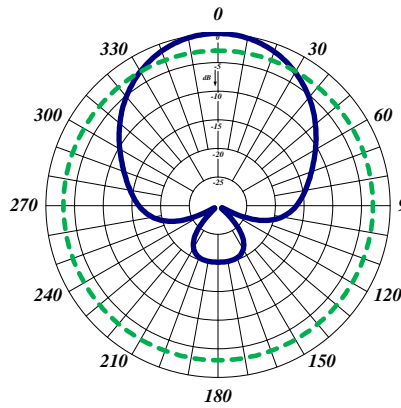


470-70-2HD



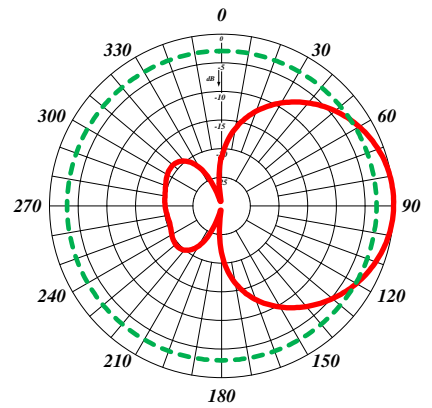
470-70-2

Horizontal Pattern



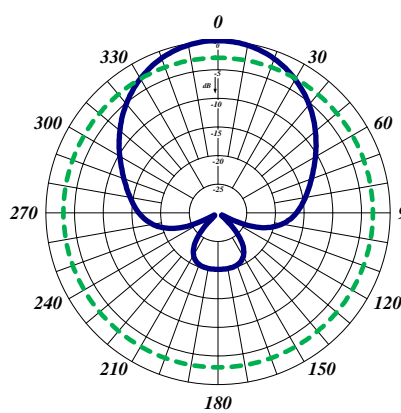
Vertical Polarization

Vertical Pattern



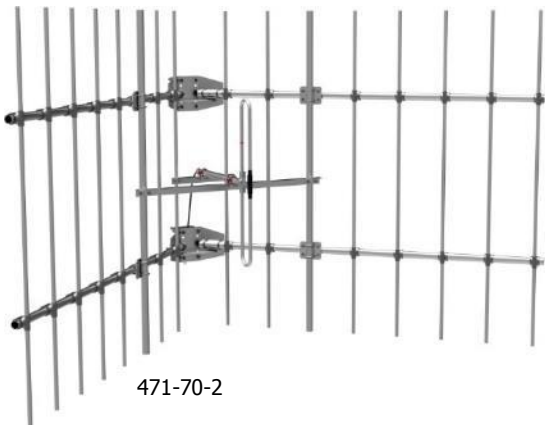
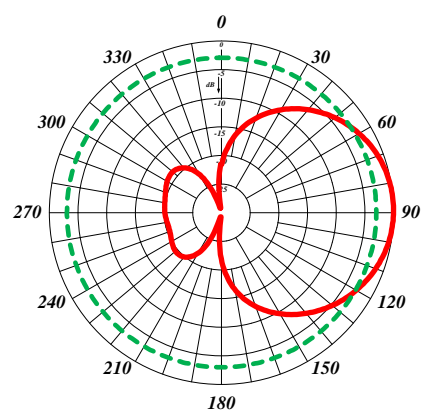
470-70-2HD

Horizontal Pattern



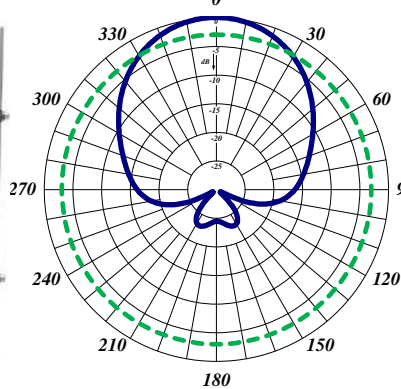
Vertical Polarization

Vertical Pattern



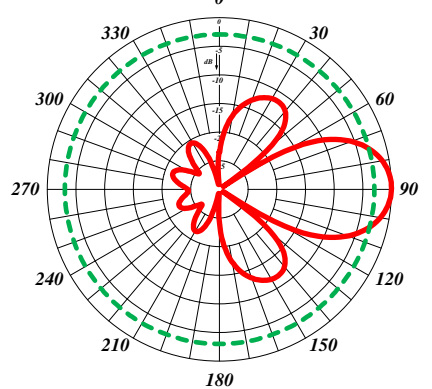
471-70-2

Horizontal Pattern



Vertical Polarization

Vertical Pattern



UHF Corner Reflector Antenna Series

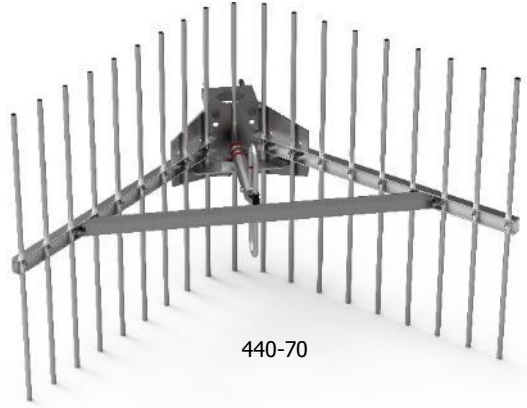
The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have a very high front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single or Dual Dipole mounted in the front of a 90° reflector, providing good directivity.
- The 365-70 is a highly directive parabolic antenna consisting of a back-firing dipole reflector assembly for increased gain and directivity.
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" of radial ice.
- The mounting hardware supplied will permit either vertical or horizontal polarization. DC ground for lightning protection. Heavy-duty versions are available. Please contact our Technical Support team.

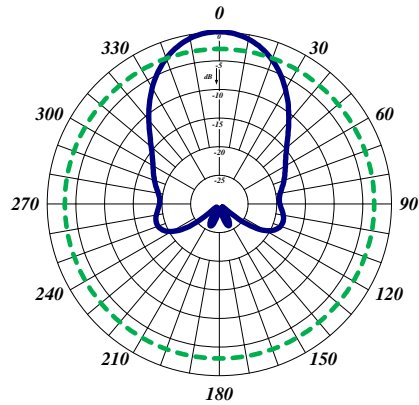
Electrical Specifications	440-70	440-70HD	442-70	365-70
Frequency Range, MHz	406-512	406-512	406-512	406-470
Nominal Gain, dBd	9.5	9.5	12.0	15.0
Bandwidth: 1.5:1 VSWR, MHz	64	64	64	20
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	60°	60°	40°	32°
Vertical Beamwidth (Vert. Pol.)	45°	45°	34°	18°
Front to Back, dB	25	25	25	24
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	100	100	100	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	440-70	440-70HD	442-70	365-70
Length, in (mm)	30 (762)	30 (762)	48 (1219)	82 (2083)
Width, in (mm)	50 (1905)	50 (1905)	50 (1905)	41 (1041)
Weight, lbs. (kg)	22 (10)	36 (16)	42 (19.1)	25 (11.3)
Rated Wind Velocity, No Ice, mph (km/h)	125 (201)	135 (217)	125 (201)	100 (161)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	95 (153)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	97 (44)	210 (934)	185 (84)	233 (109)
Projected Area, ft² (m²)	3.6 (0.34)	3.6 (0.34)	6.9 (0.64)	8.7 (0.8)
Mounting Hardware Included	172-85 Clamp	172-85 Clamp	172-85 Clamp	172-85 Clamp



365-70

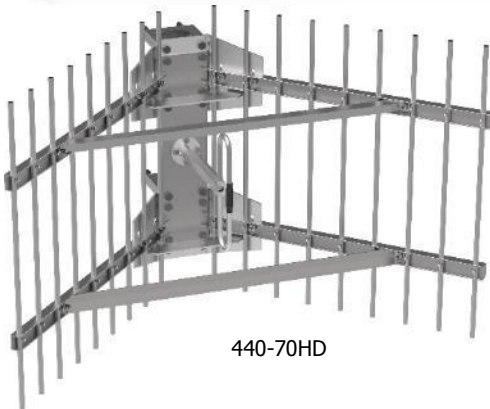
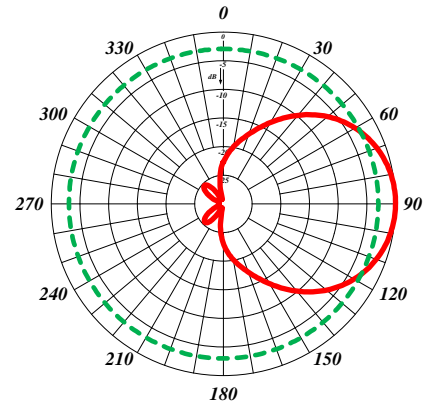


Horizontal Pattern

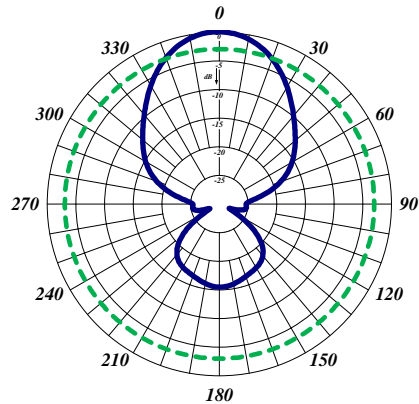


Vertical Polarization

Vertical Pattern

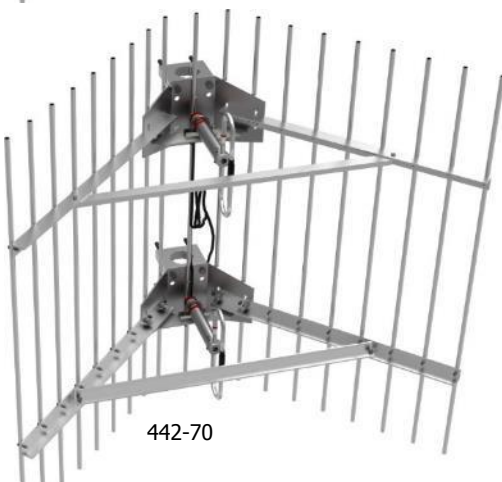
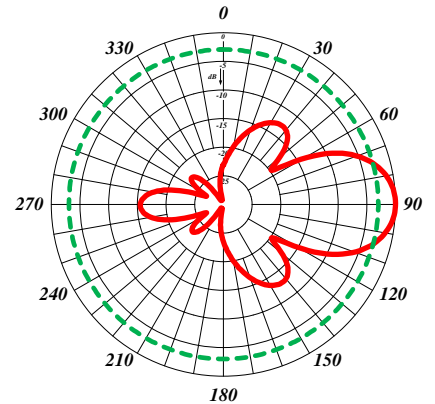


Horizontal Pattern

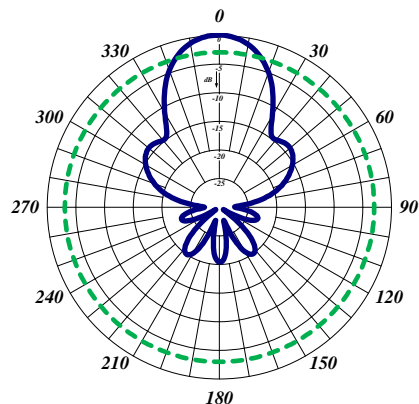


Vertical Polarization

Vertical Pattern

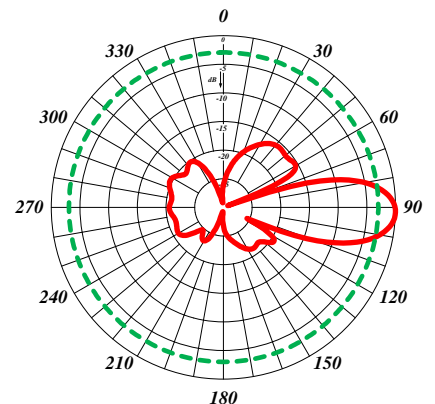


Horizontal Pattern

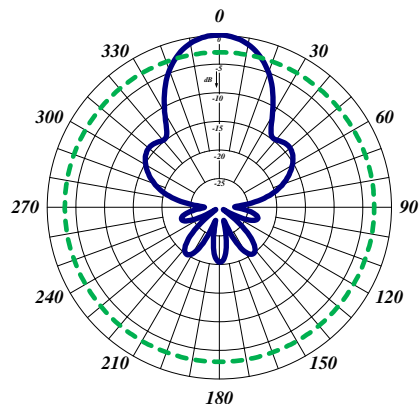


Horizontal Polarization

Vertical Pattern

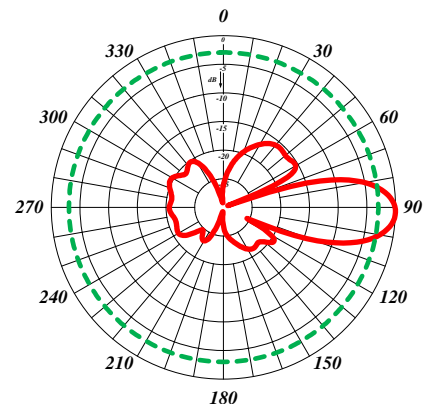


Horizontal Pattern



Horizontal Polarization

Vertical Pattern



Parabolic Reflector Series Antennas

The Reflector antenna is a SRSP-507 Category A compliant antenna. These antennas have a very high front-to-back ratio. They are broadband and are ideal for point-to-point applications where restrictions on beam width are present. Performance is constant throughout the band.

- Mechanical resonance reducing design.
- Each antenna has a rugged design to withstand harsh environmental conditions.
- The 965-70 is a highly-directive parabolic antenna consisting of a back-firing dipole reflector assembly for increased gain and directivity.
- These antennas have ultra-low VSWR ratings, and will not exceed 1.5:1 VSWR ratio with 0.5" of radial ice.
- The mounting hardware supplied will permit either vertical or horizontal polarization. DC ground for lightning protection. Black Anodized and Dipole Radome protected versions are available. Please contact our Technical Support team for consultation.

Electrical Specifications	965-70	965-70B	965-70BR
Frequency Range, MHz	764-960	764-960	764-960
Nominal Gain, dBd	16.5	16.5	16.5
Bandwidth: 1.5:1 VSWR, MHz	72	72	72
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	12	12	12
Vertical Beamwidth (Vert. Pol.)	30	30	30
Front to Back, dB	25	25	25
Pattern	Directional	Directional	Directional
Power Rating, Watts	200	200	200
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	965-70	965-70B	965-70BR
Length, in (mm)	68 (1727)	68 (1727)	68 (1727)
Width, in (mm)	36 (914)	36 (914)	36 (914)
Weight, lbs. (kg)	49 (22.3)	49 (22.3)	51 (23.2)
Rated Wind Velocity, No Ice, mph (km/h)	110 (177)	110 (177)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	1.9 (0.46)	1.9 (0.46)	1.9 (0.46)
Projected Area, ft ² (m ²)	4.9 (0.46)	4.9 (0.46)	5 (0.47)
Mounting Hardware Included	112-85 Clamp	112-85 Clamp	112-85 Clamp



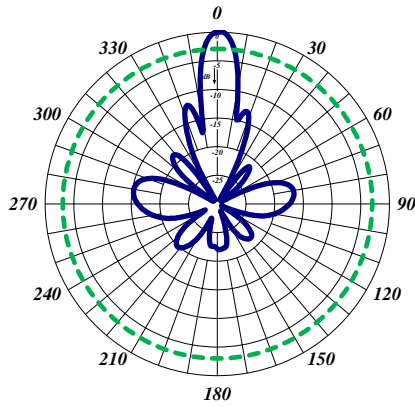
965-70

* See appendix for ordering information (page 231) *



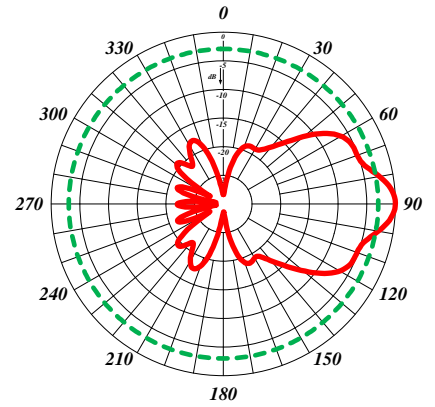
965-70

Horizontal Pattern



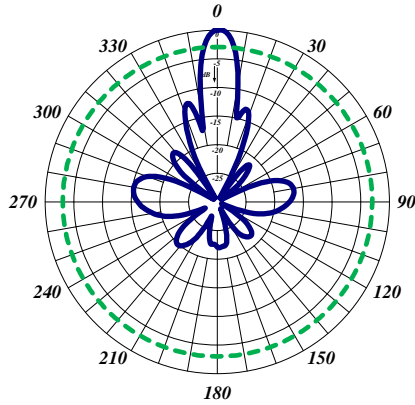
Vertical Polarization

Vertical Pattern



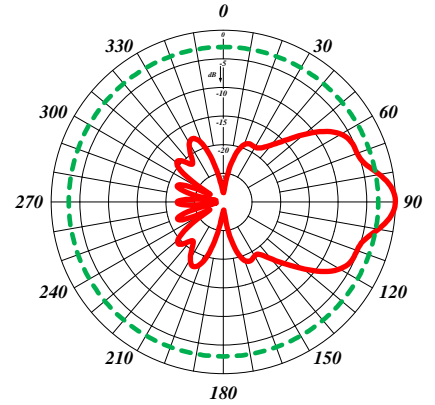
965-70B

Horizontal Pattern



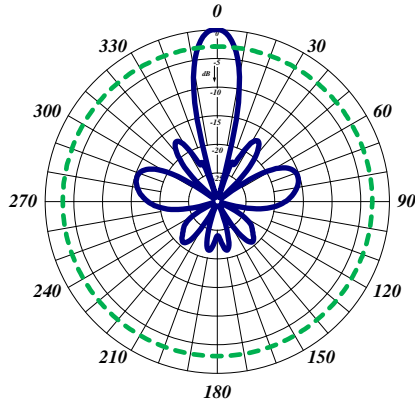
Vertical Polarization

Vertical Pattern



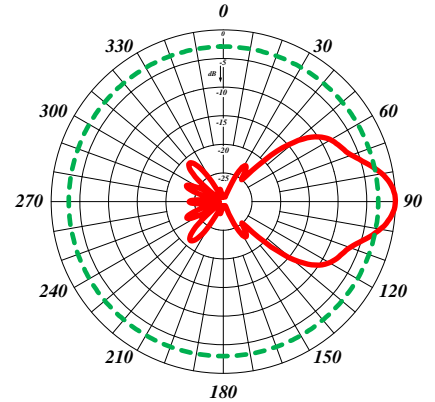
965-70BR

Horizontal Pattern



Vertical Polarization

Vertical Pattern

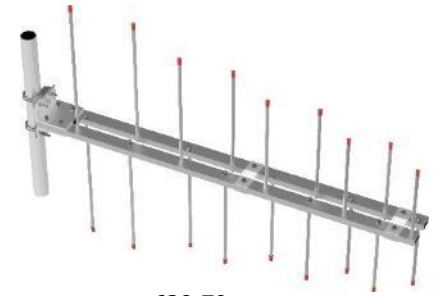


Log Periodic Series Antennas

The Log Periodic Antennas are available in VHF and UHF configurations. These antennas have an extremely good front-to-back ratio. They are wideband and are ideal for base station or in-building applications. These antennas are great for providing underground coverage within garages. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Please contact our Technical Support team for consultation.

Electrical Specifications	635-70	655-70	638-70
Frequency Range, MHz	132-174	132-174	138-174
Nominal Gain, dBd	6.0	6.0	8.0
Bandwidth: 1.5:1 VSWR, MHz	42	42	36
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	106°	106°	75°
Vertical Beamwidth (Vert. Pol.)	60°	30°	55°
Front to Back, dB	25	25	25
Pattern	Directional	Directional	Directional
Power Rating, Watts	500	500	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	635-70	655-70	638-70
Length, in (mm)	42 (1067)	42 (1067)	60 (1524)
Width, in (mm)	44 (1118)	44 (1118)	44.5 (1130)
Weight, lbs. (kg)	8 (3.6)	16 (7.2)	16.8 (7.8)
Rated Wind Velocity, No Ice, mph (km/h)	158 (254)	158 (254)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	108 (173)	108 (173)	108 (173)
Lateral Thrust @ c, wind, lbs. (kg)	31 (14)	31 (14)	47.5 (21.5)
Torsional Moment @ 100 mph, ft.*lb (kg*m)	56 (7.8)	N/A	121 (16.7)
Projected Area, ft ² (m ²)	0.86 (0.08)	0.86 (0.08)	1.26 (0.120)
Mounting Information: (clamp included) for pipe size O.D. in (mm)	1" to 2.5" (64)	1" to 2.5" (64)	1" to 2.5" (64)



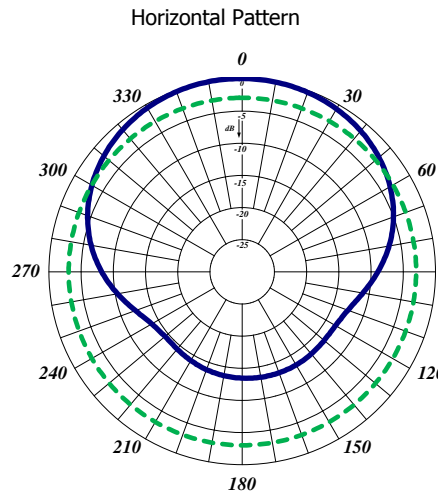
638-70

* See appendix for ordering information (page 231) *

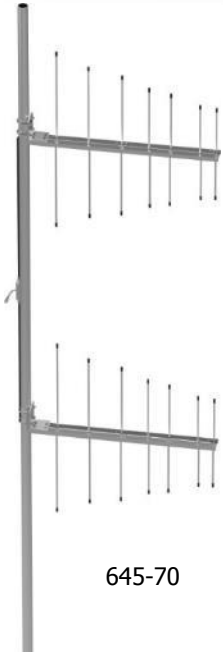
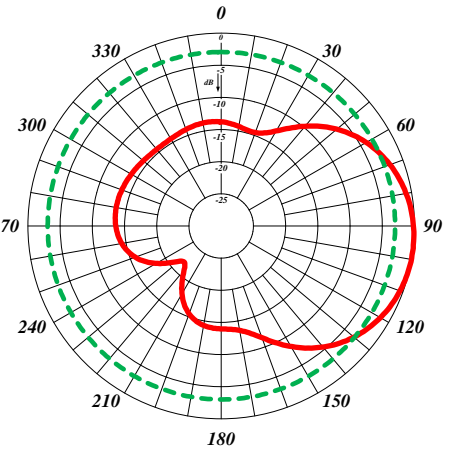


635-70

Vertical Polarization

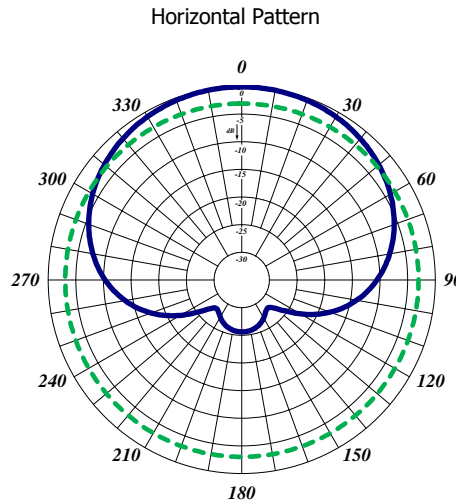


Vertical Pattern

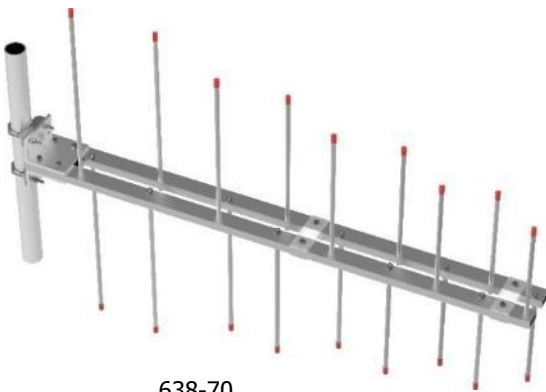
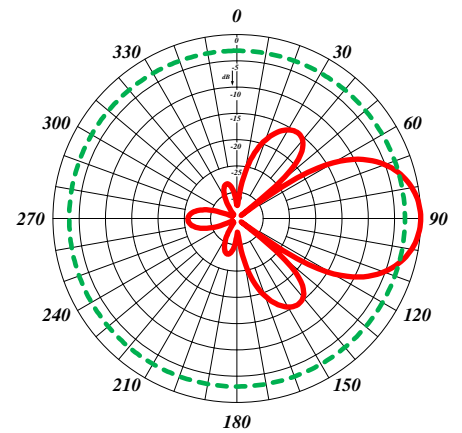


645-70

Vertical Polarization

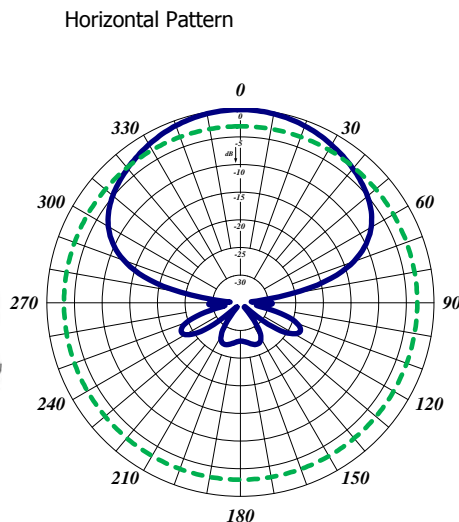


Vertical Pattern

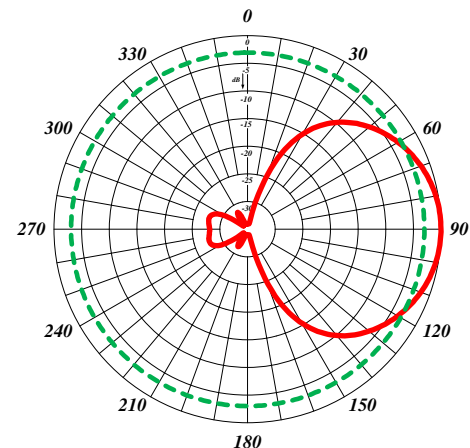


638-70

Vertical Polarization



Vertical Pattern



Log Periodic Series Antennas

The Log Periodic Antennas are available in VHF and UHF configurations. These antennas have a very high front-to-back ratio. They are wideband and are ideal for base station or in-building applications. We have had great success with these antennas providing underground coverage within garages. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Please contact our Technical Support team for consultation.

Electrical Specifications	415-70	465-70
Frequency Range, MHz	406-512	406-512
Nominal Gain, dBd	Unity	6.0
Bandwidth: 1.5:1 VSWR, MHz	40	64
Polarization	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	N/A	106°
Vertical Beamwidth (Vert. Pol.)	84°	60°
Front to Back, dB	N/A	20
Pattern	Directional	Directional
Power Rating, Watts	250	250
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	415-70	465-70
Length, in (mm)	18 (457)	15 (381)
Width, in (mm)	14.3 (362)	16 (406)
Weight, lbs. (kg)	2.6 (1.2)	3.3 (1.47)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	120 (193)	110 (177)
Lateral Thrust @ c, wind, lbs. (kg)	12 (5.4)	14 (6.4)
Torsional Moment @ 100 mph, ft.*lb (kg*m)	6.3 (0.88)	6.4 (0.89)
Projected Area, ft ² (m ²)	0.44 (0.04)	0.50 (0.05)
Mounting Information: Max Pipe Size (mm)	1" to 2.5" (64)	1" to 2.5" (64)



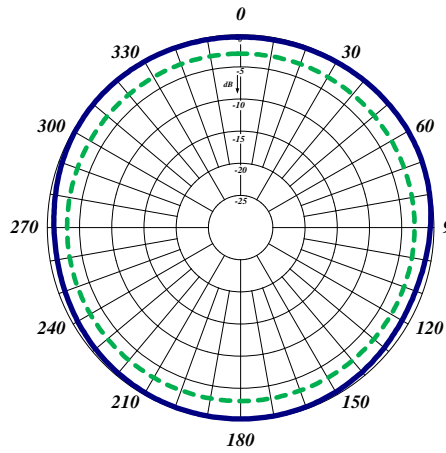
415-70

* See appendix for ordering information (page 232) *



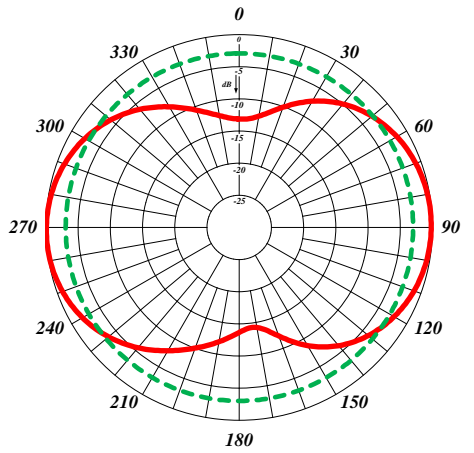
415-70

Horizontal Pattern



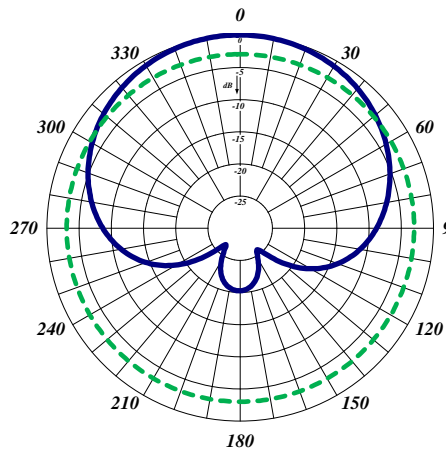
Vertical Polarization

Vertical Pattern



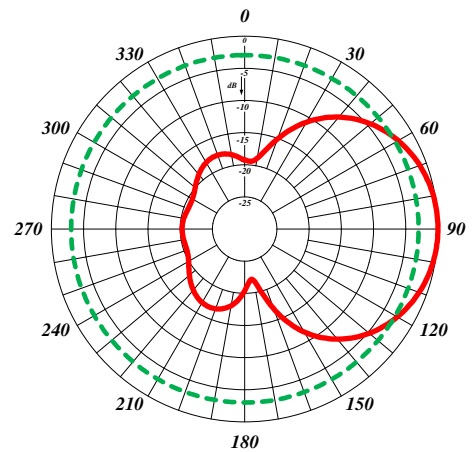
465-70

Horizontal Pattern



Vertical Polarization

Vertical Pattern



Data Antenna Series

The Data Antenna Series are high quality, high performance, utility grade antennas. We have many different versions of these antennas available.

We have modified mobile antennas, in order to produce low-cost and effective base station antennas that maximize performance.

- Custom designed.
- Meets your specific needs.
- Designed for any application as required by the customer.

Electrical Specifications	590-75BSMO
Frequency Range, MHz	824-896
Nominal Gain, dBd	2.0
Polarization	Vertical
Pattern	Omnidirectional
Power Rating, Watts	200
Nominal Impedance, Ohms	50
Standard Termination	Type N Female*
Mechanical Specifications	590-75BSMO
Length, in (mm)	min 14" @ lowest freq.
Diameter, in (mm)	N/A
Weight, lbs (kg)	N/A
Radiator	Stainless Steel
Base	ABS, Ultrasonic Brass Insert
Contact	Spring Loaded, Gold Plated
Mounting	BSMOLC w/N-Female

* Other Terminations are available.

