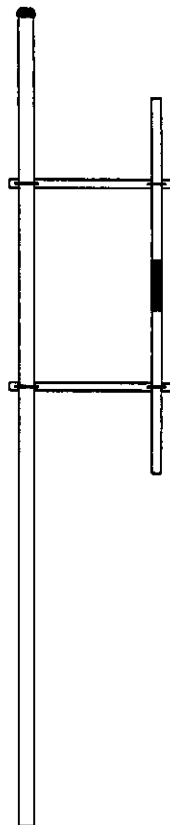


HEAVY DUTY ANTENNAS



Features

- ◆ Wideband antenna - will operate over entire frequency range of 138-174 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design for extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance
- ◆ Field adjustable pattern antenna with external harness, Model A-1510A-HD is also available at extra cost.
- ◆ Suitable for either sidemount or top-mount application



HEAVY DUTY SERIES

Dipole Antenna **A-1510C-HD**

4.0 - 4.5 dBd

138-174 MHz

This heavy duty broadband full-wave single dipole antenna will withstand extreme environmental conditions. Due to its wide bandwidth (36 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-1510C-HD

Frequency Range:	MHz	138-174
Nominal Gain:	dBd	4.0-4.5
Bandwidth, 1.5:1 VSWR:	MHz	36
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	60
Front to Back Ratio:	dB	6
Power Rating:	Watts	300
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

Note: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-1510C-HD

Length:	in.(mm)	96 (2438)
Weight:	lbs.(kg)	18 (8.2)
Rated Wind Velocity:	mph(km/h)	200 (324)
Rated Wind Velocity with 1.5 in.(38 mm) radial ice:	mph(km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs(kg)	203 (92.3)
Bending Moment at top mounting clamp [110 mph (177 km/h) - no ice]:	(Ft/lbs) (Kg/m)	250 (35)
Equivalent Flat Plate Area:	Ft ² (m ²)	1.85 (.17)

Mounting information:

No clamps supplied. Base pipe 2.38" O.D. (60 mm).



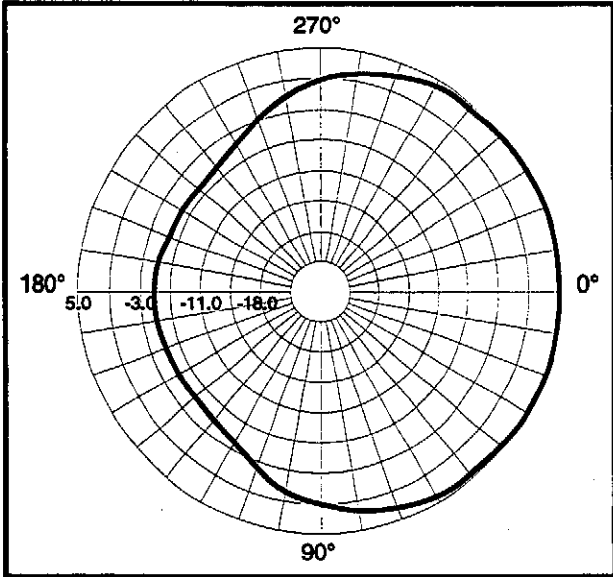
HEAVY DUTY SERIES

Dipole Antenna A-1510C-HD

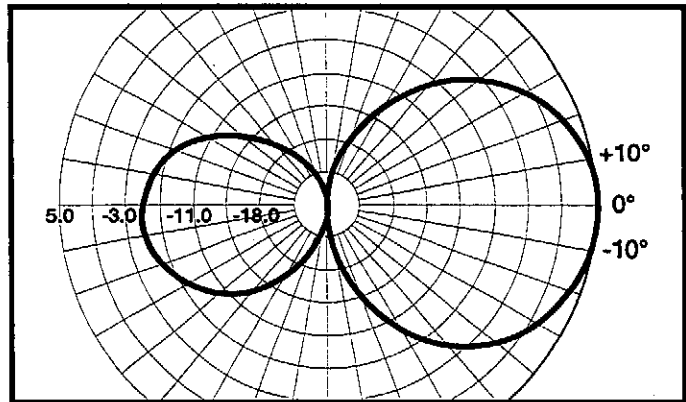
4.0 - 4.5 dBd

138-174 MHz

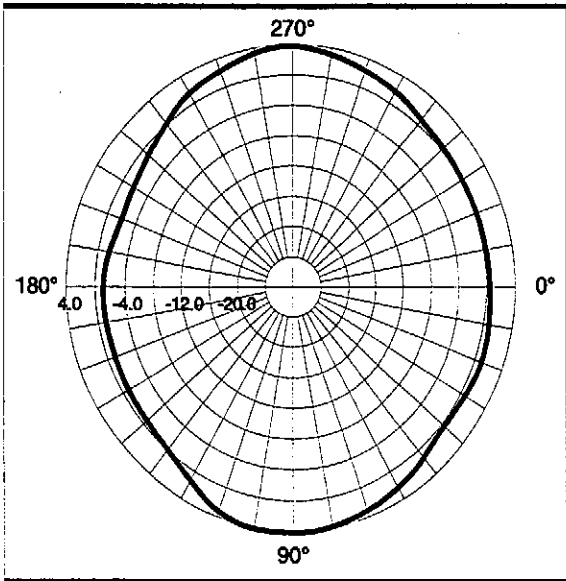
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



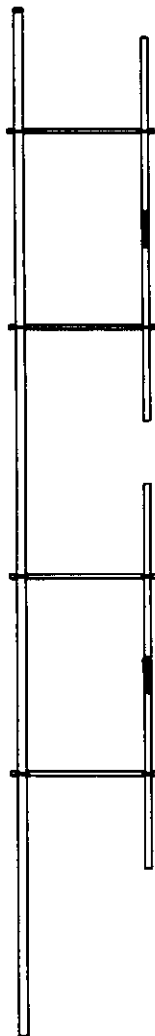
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 138-174 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design for extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance
- ◆ Field adjustable pattern antenna with external harness, model A-1510A2-HD is available at extra cost
- ◆ Suitable for either sidemount or top-mount application



HEAVY DUTY SERIES

Dipole Array A-1510C2-HD

7.0 - 7.5 dBd

138-174 MHz

This heavy duty broadband full-wave two dipole array will withstand extreme environmental conditions. Due to its wide bandwidth (36 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-1510C2-HD

Frequency Range:	MHz	138-174
Nominal Gain:	dBd	7.0 - 7.5
Bandwidth, 1.5:1 VSWR:	MHz	36
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	26
Front to Back Ratio:	dB	6
Power Rating:	Watts	500
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

Note: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-1510C2-HD

Length:	in. (mm)	168 (4267)
Weight:	lbs. (kg)	42 (19.1)
Rated Wind Velocity:	mph(km/h)	200 (324)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph(km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs(kg)	377 (171)
Bending Moment at top mounting clamp [110 mph (177 km/h) - no ice]:	(Ft/lbs) (Kg/m)	1122 (157)
Equivalent Flat Plate Area:	Ft ² (m ²)	3.43 (.32)

Mounting information:

No clamps supplied. Base pipe 2.38" O.D. (60mm).



HEAVY DUTY SERIES

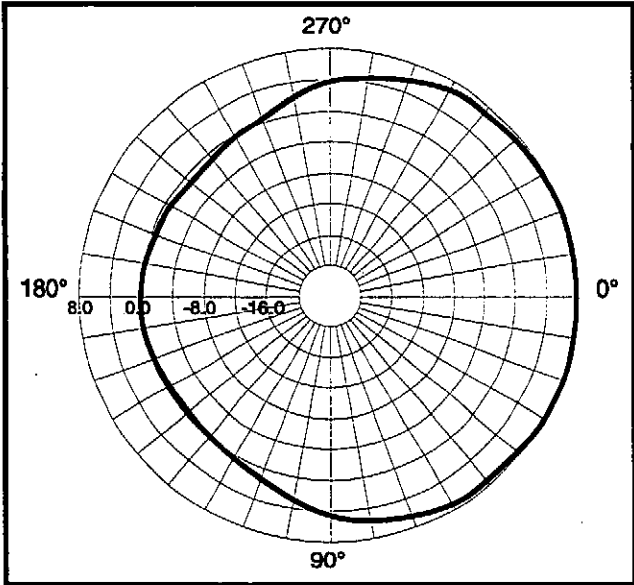
Dipole Array

A-1510C2-HD

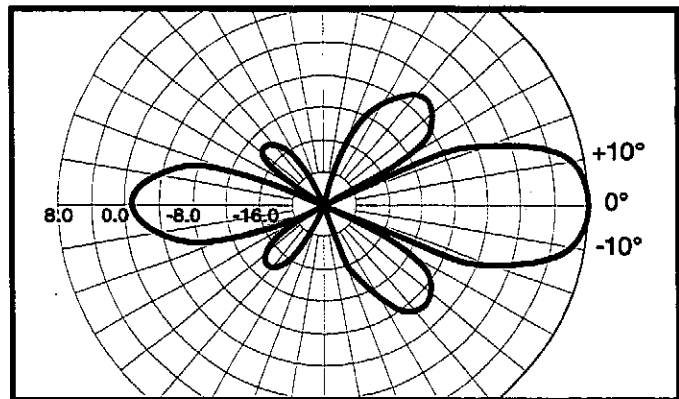
7.0 - 7.5 dBd

138-174 MHz

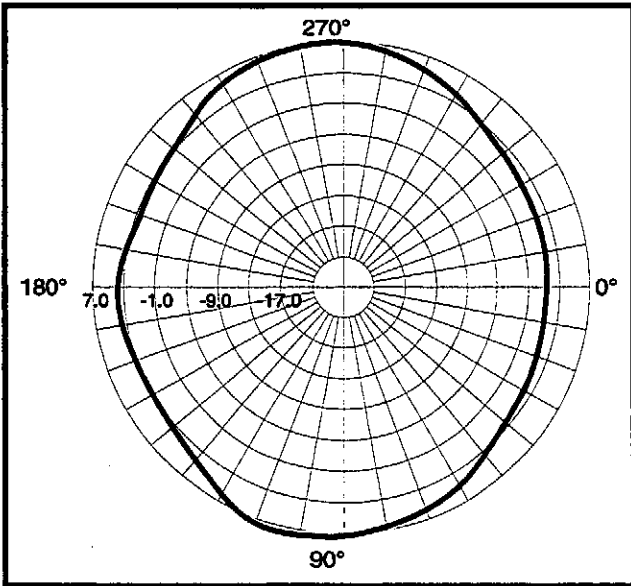
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



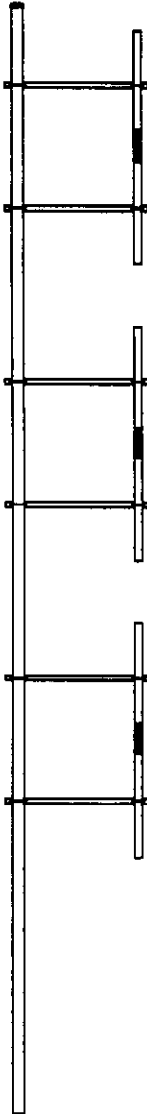
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 138-174 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design for extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance
- ◆ Field adjustable pattern antenna with external harness, model A-1510A3-HD is available at extra cost
- ◆ Two model variants offered: a sidemount version (suffix "HDSM"), and a top-mount version (suffix "HDTM")



HEAVY DUTY SERIES

Dipole Array **A-1510C3-HD**

8.5 - 9.0 dBd

138-174 MHz

This heavy duty broadband full-wave three dipole array will withstand extreme environmental conditions. Due to its wide bandwidth (36 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-1510C3-HDSM
A-1510C3-HDTM

Frequency Range:	MHz	138-174
Nominal Gain:	dBd	8.5 - 9.0
Bandwidth, 1.5:1 VSWR:	MHz	36
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	18
Front to Back Ratio:	dB	6
Power Rating:	watts	750
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

- NOTE: (1) VSWR is referenced to 50 ohms.
(2) Specify dipole-to-mast spacing when ordering.
(3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-1510C3
HDSM HDTM

		HDSM	HDTM
Length:	in. (mm)	240 (6096)	240 (6096)
Weight:	lbs. (kg)	48 (21.8)	72 (32.7)
Rated Wind Velocity:	mph (km/h)	175 (280)	175 (280)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph (km/h)	110 (177)	110 (177)
Horizontal Thrust at Rated Wind Velocity and ice load:	lbs. (kg)	553 (251)	609 (277)
Bending Moment at top mounting clamp (110 mph (177 km/h) - no ice):	Ft lbs (Kg m)	N/A	3439 (468)
Equivalent Flat Plate Area:	Ft ² (m ²)	5.02 (.48)	6.26 (0.59)
Base pipe:	in. (mm) O.D.	2.38 (60)	3.5 (89)

Mounting information
No clamps supplied.



HEAVY DUTY SERIES

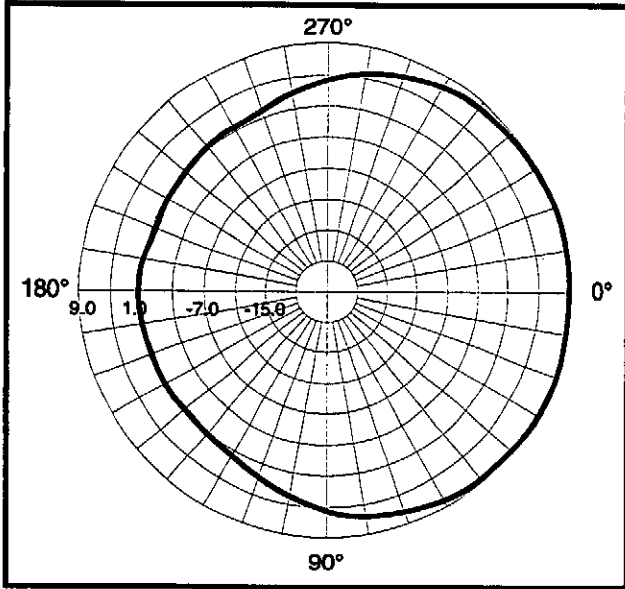
Dipole Array

A-1510C3-HD

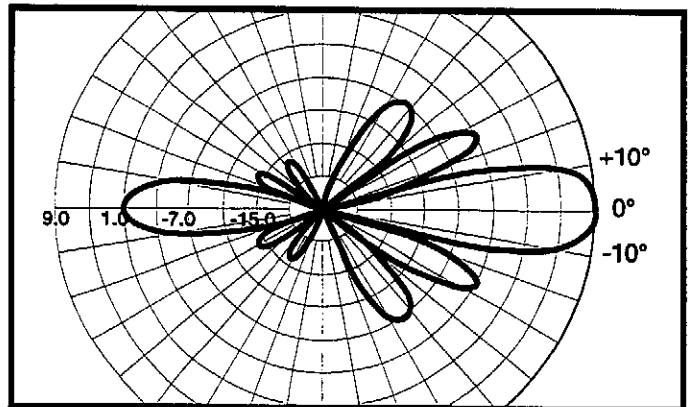
8.5 - 9.0 dBd

138-174 MHz

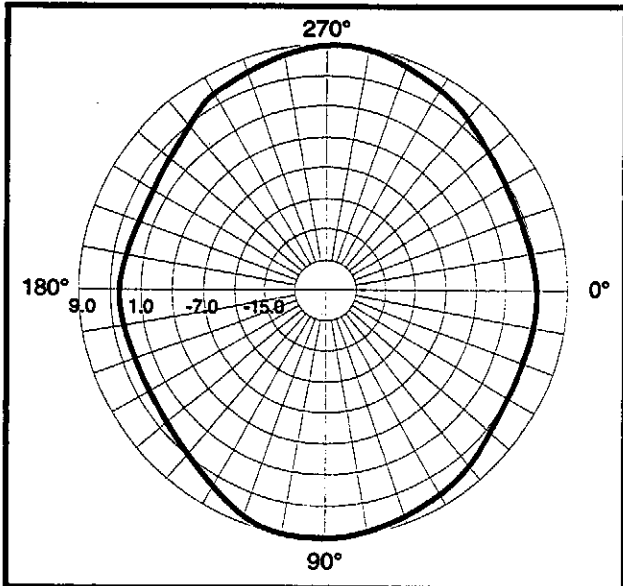
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 138-174 MHz
- ◆ Fixed dipole to mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance
- ◆ Field adjustable pattern antenna with external harness, model A-1510A6-HD is available at extra cost
- ◆ Two model variants offered: a sidemount version (suffix "HDSM"), and a top-mount version (suffix "HDTM")

HEAVY DUTY SERIES

Dipole Array **A-1510C6-HD**

11.5 - 12.0 dBd

138-174 MHz

This unique broadband full-wave six dipole array, is well suited for multicoupled systems due to its wide bandwidth and very low intermodulation response. This array consists of two A-1510C3-HD antennas harnessed together to provide a very high gain antenna needed in certain systems application. This array may be side-mounted or partially top-mounted to a supporting structure.

Electrical Specifications

**A-1510C6-HDSM
A-1510C6-HDTM**

Electrical Specifications	Unit	A-1510C6-HDSM	A-1510C6-HDTM
Frequency Range:	MHz	138-174	
Nominal Gain:	dBd	11.5 - 12.0	
Bandwidth, 1.5:1 VSWR:	MHz	36	
Horizontal Beamwidth (-3 dBd):	Deg.	170	
Vertical Beamwidth (-3 dBd):	Deg.	8	
Front to Back Ratio:	dB	6	
Power Rating:	watts	750	
Polarization:		Vertical	
Pattern:		Offset	
Lightning Protection:		DC ground	
Termination:		Type "N" Male	

NOTE: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

**A-1510C6
HDSM HDTM**

Mechanical Specifications	Unit	A-1510C6 HDSM	A-1510C6 HDTM
Length:	in. (mm)	456 (11582)	456 (11582)
Weight:	lbs. (kg)	92 (41.8)	116 (52.7)
Rated Wind Velocity:	mph (km/h)	175 (280)	175 (280)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph (km/h)	110 (177)	110 (177)
Horizontal Thrust at Rated Wind Velocity and ice load:	lbs. (kg)	1106 (503)	1162 (528)
Bending Moment at top mounting clamp [110 mph (177 km/h) - no ice]:	Ft lbs (Kg m)	NA	NA 3439 (468)
Equivalent Flat Plate Area:	Ft ² (m ²)	10.04 (.96)	11.28 (1.07)
Base pipe:	in. (mm) O.D.	2.38 (60)	2.38 (60)
		2.38 (60)	3.5 (89)

Mounting information: No clamps supplied.



HEAVY DUTY SERIES

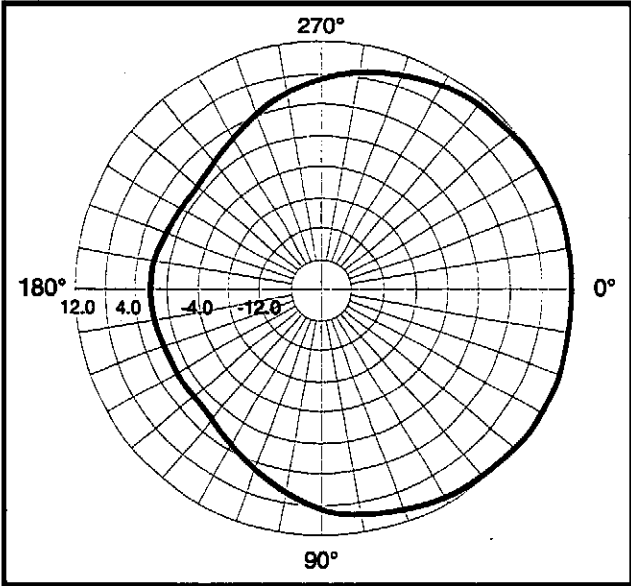
Dipole Array

A-1510C6-HD

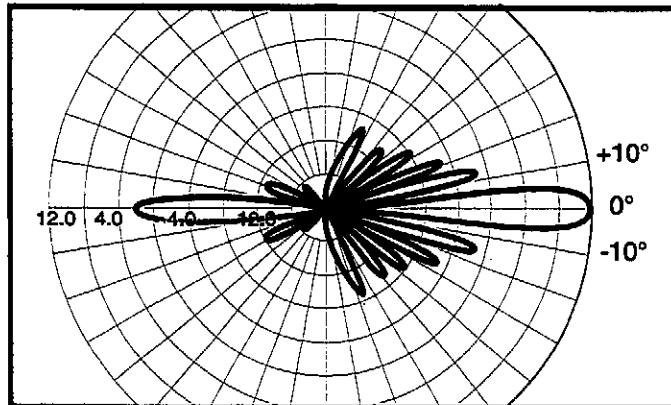
11.5 - 12.0 dBd

138-174 MHz

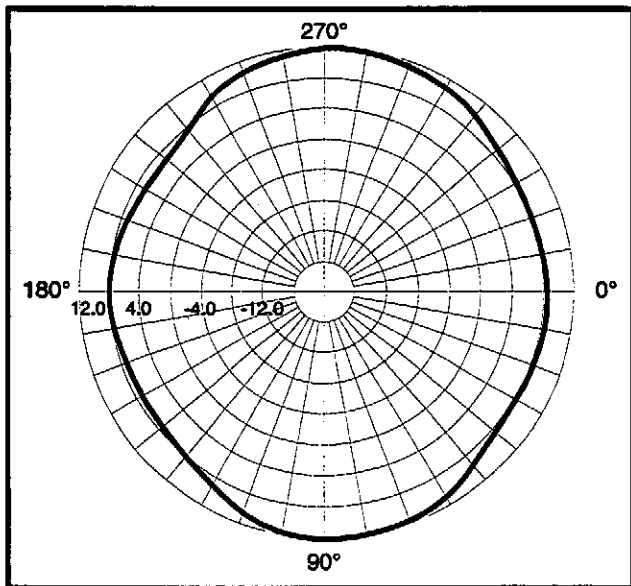
HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING



VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING



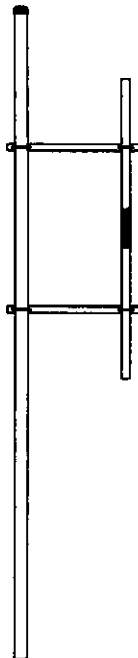
HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING





Features

- ◆ Wideband antenna - will operate over entire frequency range of 406-512 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance



HEAVY DUTY SERIES

Dipole Antenna **A-4510C-HD**

4.0-4.5 dBd

406-512 MHz

This heavy duty broadband full-wave single dipole antenna will withstand extreme environmental conditions. Due to its wide bandwidth (106 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-4510C-HD

Frequency Range:	MHz	406-512
Nominal Gain:	dBd	4.0-4.5
Bandwidth, 1.5:1 VSWR:	MHz	106
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	60
Front to Back Ratio:	dB	6
Power Rating:	Watts	150
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

- Note:
- (1) VSWR is referenced to 50 ohms.
 - (2) Specify dipole-to-mast spacing when ordering
 - (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-4510C-HD

Length:	in. (mm)	60 (1524)
Weight:	lbs. (kg)	8 (3.6)
Rated Wind Velocity:	mph (km/h)	260 (418)
Rated Wind Velocity with 1.5 in.(38 mm) radial ice:	mph (km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs. (kg)	91 (41.3)
Bending Moment at top mounting clamp (110 mph (177 km/h) -no ice:	(Ft/lbs) (N*m)	50 (17.8)
Equivalent Flat Plate Area:	Ft ² (m ²)	0.73 (.07)

Mounting information:

No clamps supplied. Base pipe 1.9" O.D. (48mm)



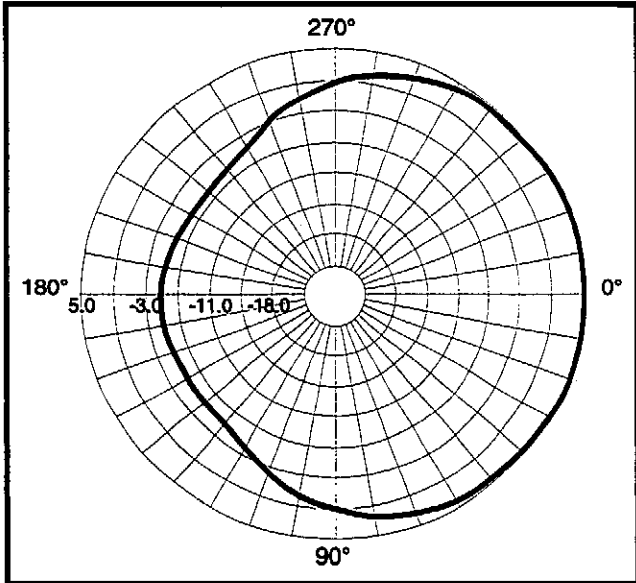
HEAVY DUTY SERIES

Dipole Antenna **A-4510C-HD**

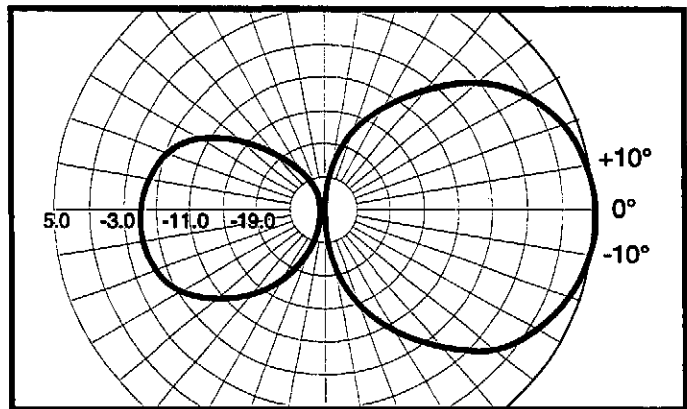
4.0-4.5 dBd

406-512 MHz

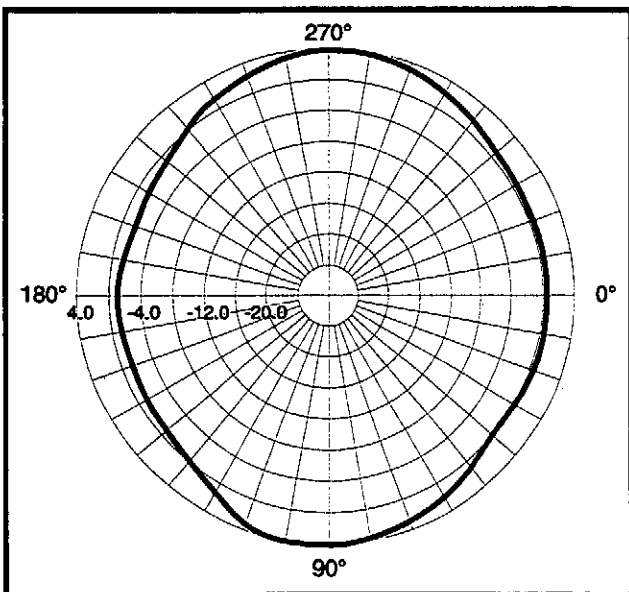
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



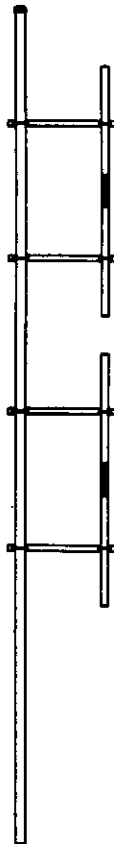
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 406-512 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance



HEAVY DUTY SERIES

Dipole Array A-4510C2-HD

7.0 - 7.5 dBd

406-512 MHz

This heavy duty broadband full-wave two dipole array will withstand extreme environmental conditions. Due to its wide bandwidth (106 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-4510C2-HD

Frequency Range:	MHz	406-512
Nominal Gain:	dBd	7.0-7.5
Bandwidth, 1.5:1 VSWR:	MHz	106
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	26
Front to Back Ratio:	dB	6
Power Rating:	Watts	250
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

Note: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-4510C2-HD

Length:	in. (mm)	84 (2134)
Weight:	lbs. (kg)	11 (5.0)
Rated Wind Velocity:	mph (km/h)	225 (362)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph (km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs. (kg)	145 (65.8)
Bending Moment at top mounting clamp (110 mph (177 km/h) - no ice):	(Ft/lbs) (N*m)	156 (55.5)
Equivalent Flat Plate Area:	Ft ² (m ²)	1.15 (.11)

Mounting information:

No clamps supplied. Base pipe 1.9" O.D. (48mm).



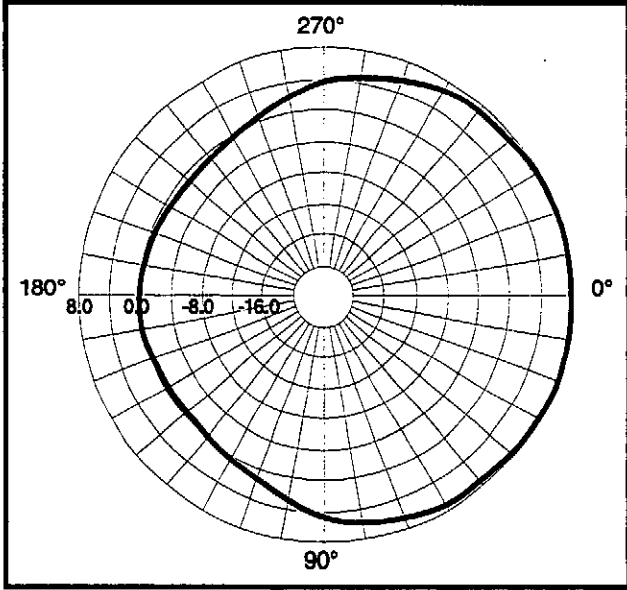
HEAVY DUTY SERIES

Dipole Array A-4510C2-HD

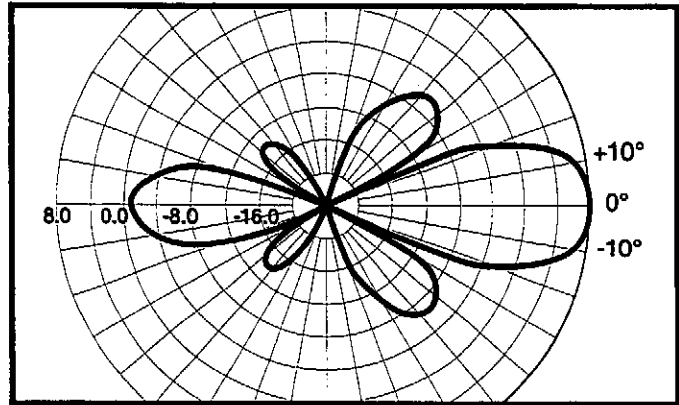
7.0 - 7.5 dBd

406-512 MHz

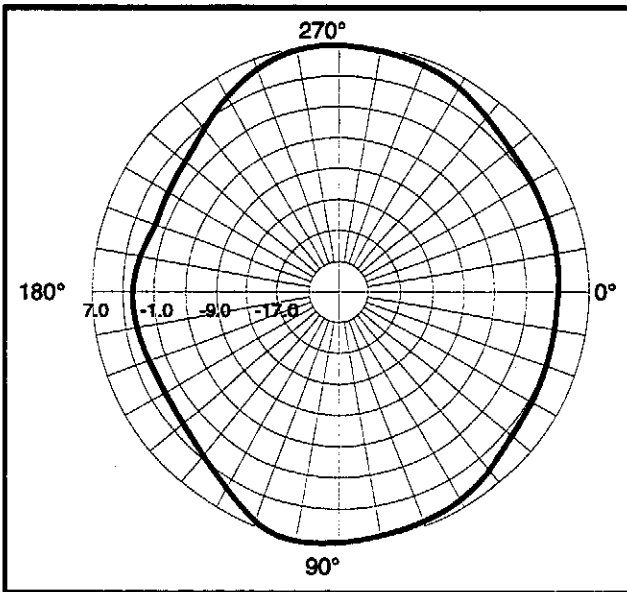
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



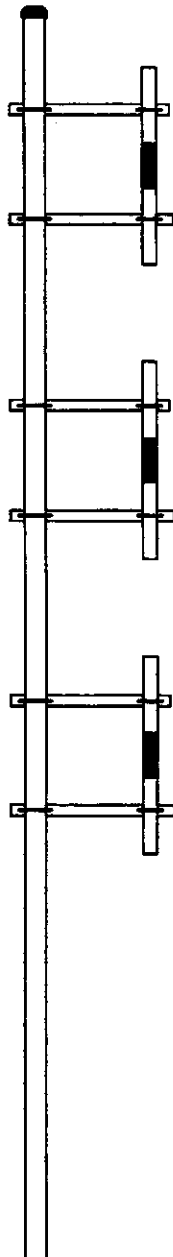
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 406-512 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance



HEAVY DUTY SERIES

Dipole Array **A-4510C3-HD**

8.5 - 9.0 dBd

406-512 MHz

This heavy duty broadband full-wave three dipole array will withstand extreme environmental conditions. Due to its wide bandwidth (106 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-4510C3-HD

Frequency Range:	MHz	406-512
Nominal Gain:	dBd	8.5-9.0
Bandwidth, 1.5:1 VSWR:	MHz	106
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	18
Front to Back Ratio:	dB	6
Power Rating:	Watts	500
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

Note: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-4510C3-HD

Length:	in. (mm)	108 (2743)
Weight:	lbs. (kg)	23 (10.4)
Rated Wind Velocity:	mph (km/h)	170 (274)
Rated Wind Velocity with 0.5 in. (13mm) radial ice:	mph (km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs. (kg)	210 (95.3)
Bending Moment at top mounting clamp (110 mph (177 km/h) - no ice):	(Ft/lbs) (N*m)	392 (139.5)
Equivalent Flat Plate Area:	Ft ² (m ²)	1.75 (.16)

Mounting information:

No clamps supplied. Base pipe 2.38" O.D. (60 mm).



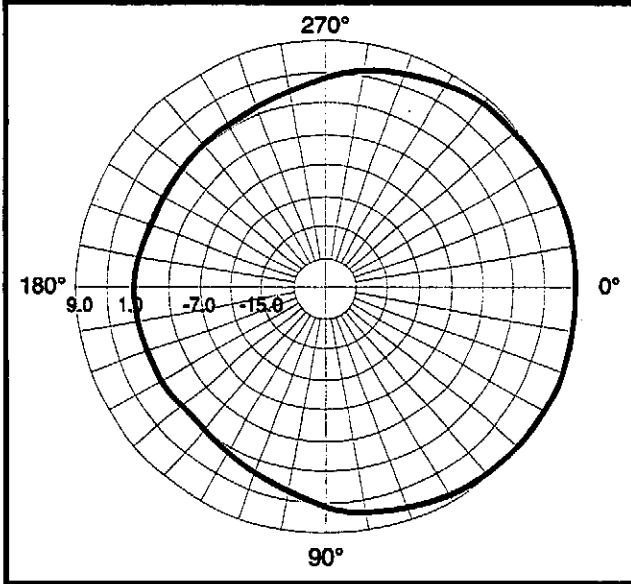
HEAVY DUTY SERIES

Dipole Array A-4510C3-HD

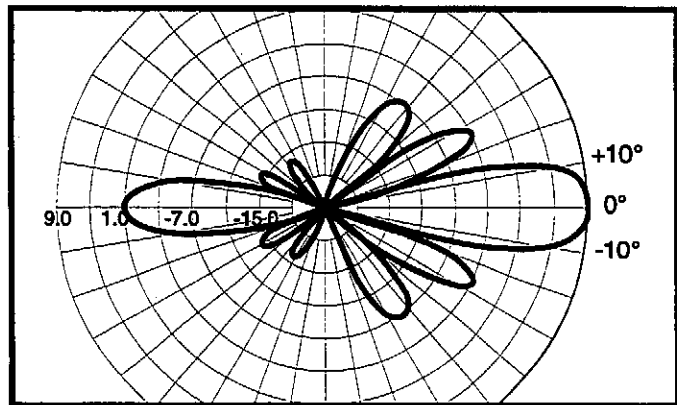
8.5 - 9.0 dBd

406-512 MHz

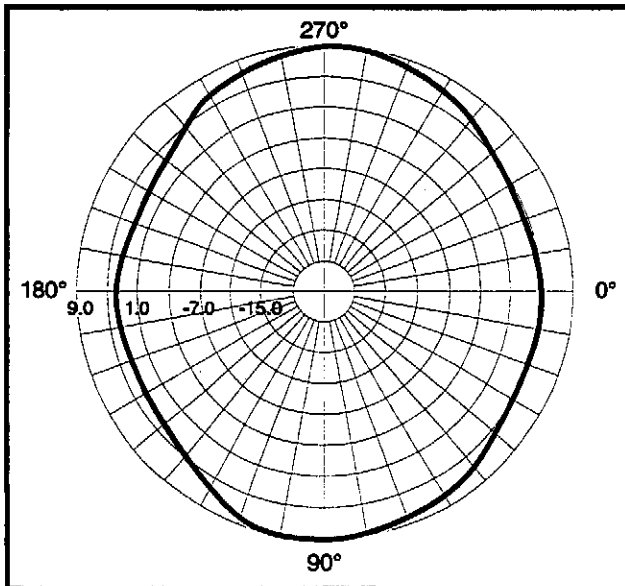
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 406-512 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance



HEAVY DUTY SERIES

Dipole Array **A-4510C6-HD**

11.5 - 12.0 dBd

406-512 MHz

This heavy duty broadband full-wave six dipole array will withstand extreme environmental conditions. Due to its wide bandwidth (106 MHz) and very low intermodulation response, this antenna is well suited for multicoupled systems.

Electrical Specifications

A-4510C6-HD

Frequency Range:	MHz	406-512
Nominal Gain:	dBd	11.5-12.0
Bandwidth, 1.5:1 VSWR:	MHz	106
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	8
Front to Back Ratio:	dB	6
Power Rating:	Watts	500
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

- Note:
- (1) VSWR is referenced to 50 ohms.
 - (2) Specify dipole-to-mast spacing when ordering.
 - (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-4510C6-HD

Length:	in. (mm)	192 (4877)
Weight:	lbs. (kg)	50 (22.7)
Rated Wind Velocity:	mph (km/h)	150 (241)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph (km/h)	110 (177)
Horizontal Thrust at Rated Wind Velocity and Ice Load:	lbs. (kg)	393 (178.6)
Bending Moment at top mounting clamp (110 mph (177 km/h) - no ice):	(Ft /lbs) (Kg m)	2207 (303)
Equivalent Flat Plate Area:	Ft ² (m ²)	3.34 (.31)

Mounting information:

No clamps supplied. Base pipe 2.88" (73.2 mm) O.D.



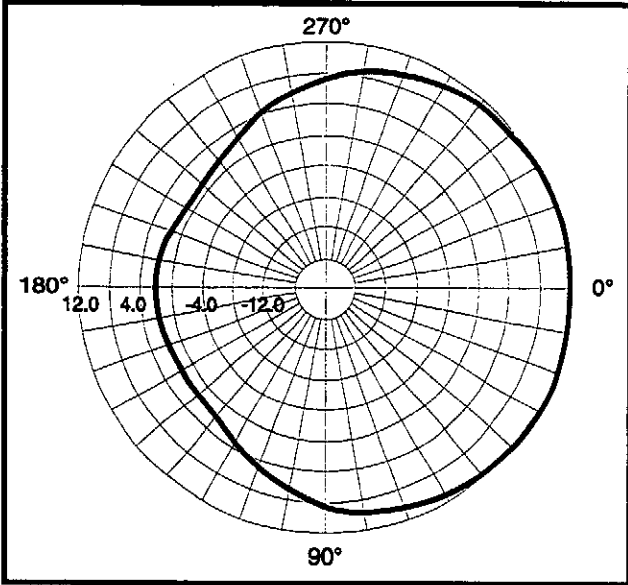
HEAVY DUTY SERIES

Dipole Array A-4510C6-HD

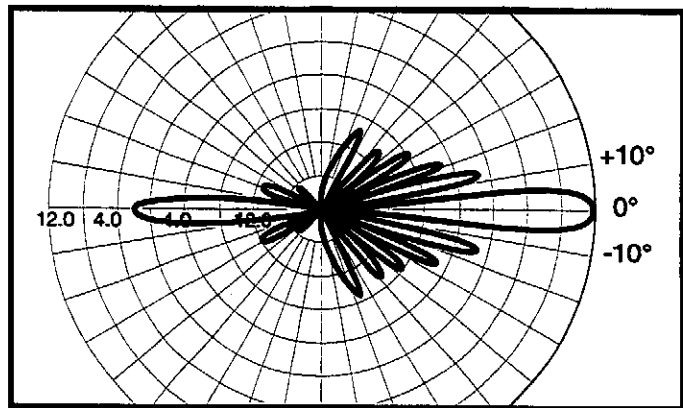
11.5 - 12.0 dBd

406-512 MHz

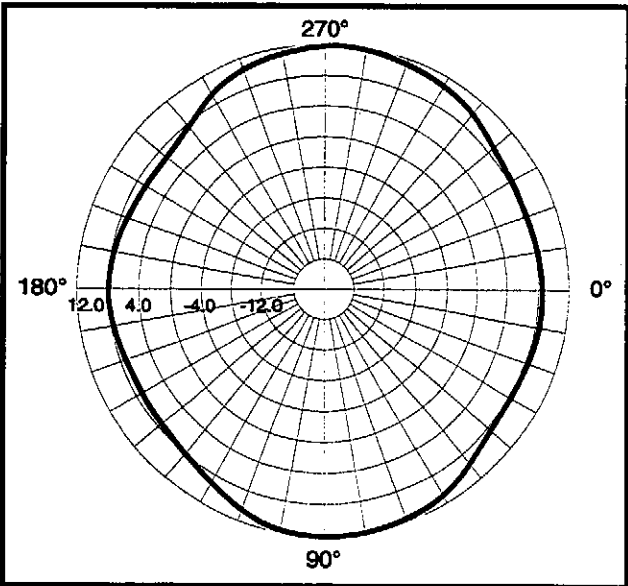
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



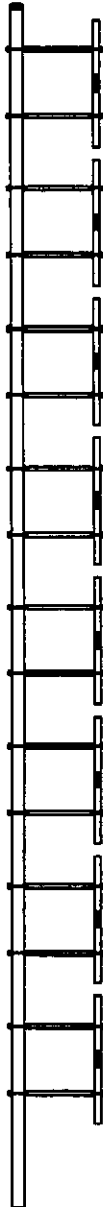
**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**





Features

- ◆ Wideband antenna - will operate over entire frequency range of 406-470 MHz
- ◆ Fixed dipole-to-mast spacings of 1/4, 3/8 or 1/2 wave for controlled radiation pattern based on system applications
- ◆ Weatherproof design - completely sealed internal harness to eliminate moisture problems and improve resistance to temperature and humidity extremes
- ◆ Heavy duty design to withstand extreme wind and ice conditions
- ◆ DC grounded to protect against damage from lightning strikes
- ◆ Icing immunity due to its unique dipole configuration
- ◆ 6061-T6 aluminum elements and stainless steel hardware for high strength, low weight and corrosion resistance



HEAVY DUTY SERIES

Dipole Array **A-4510C8-HD**

13.0 - 13.5 dBd

406-470 MHz

This heavy duty broadband full-wave eight dipole array will withstand extreme environmental conditions and provide very high gain needed in certain system applications. A special harness design along with proper dipole-to-dipole spacing provide a certain amount of null fill for close-in application without degradation to the main signal. It is an ideal antenna for wide area coverage.

Electrical Specifications

A-4510C8 -HD

Frequency Range:	MHz	406-470
Nominal Gain:	dBd	13.0-13.5
Bandwidth, 1.5:1 VSWR:	MHz	64
Horizontal Beamwidth (-3 dBd):	Deg.	170
Vertical Beamwidth (-3 dBd):	Deg.	6
Front to Back Ratio:	dB	10
Power Rating:	Watts	500
Polarization:		Vertical
Pattern:		Offset
Lightning Protection:		DC ground
Termination:		Type "N" Male

Note: (1) VSWR is referenced to 50 ohms.
 (2) Specify dipole-to-mast spacing when ordering.
 (3) Horizontal & vertical beamwidth values are measured at quarterwave spacing.

Mechanical Specifications

A-4510C8-HD

Length:	in. (mm)	240 (6096)
Weight:	lbs. (kg)	65 (29.5)
Rated Wind Velocity:	mph (km/h)	150 (241)
Rated Wind Velocity with 1.5 in. (38 mm) radial ice:	mph (km/h)	110 (177)
Horizontal Thrust at Rated Wind velocity and Ice Load:	lbs. (kg)	609 (276.8)
Bending Moment at top mounting clamp (110 mph (177 km/h) - no ice):	(Ft lbs) (Kg m)	3439 (473.5)
Equivalent Flat Plate Area:	Ft ² (m ²)	6.26 (.58)

Mounting information:

No clamps supplied. Base pipe 3.5" (89 mm). O.D.



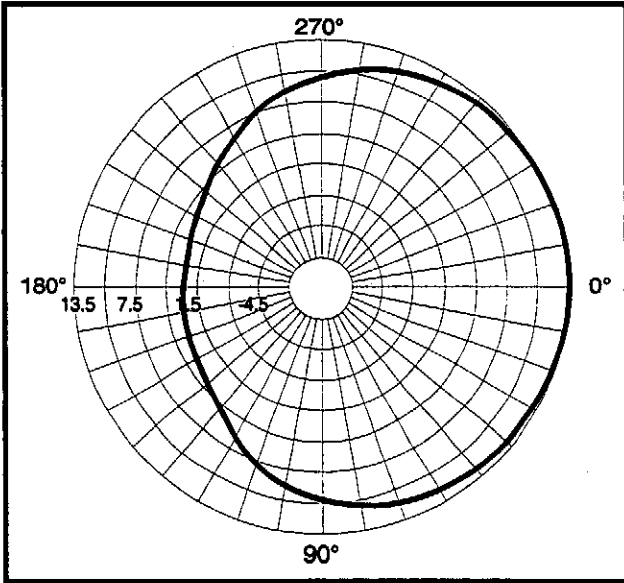
HEAVY DUTY SERIES

Dipole Array **A-4510C8-HD**

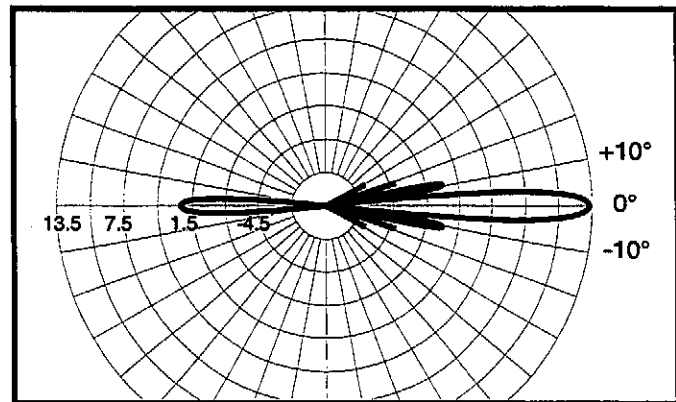
13.0 - 13.5 dBd

406-470 MHz

**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**VERTICAL PATTERN FOR VERTICAL POLARIZATION
QUARTERWAVE SPACING**



**HORIZONTAL PATTERN FOR VERTICAL POLARIZATION
HALFWAVE SPACING**

