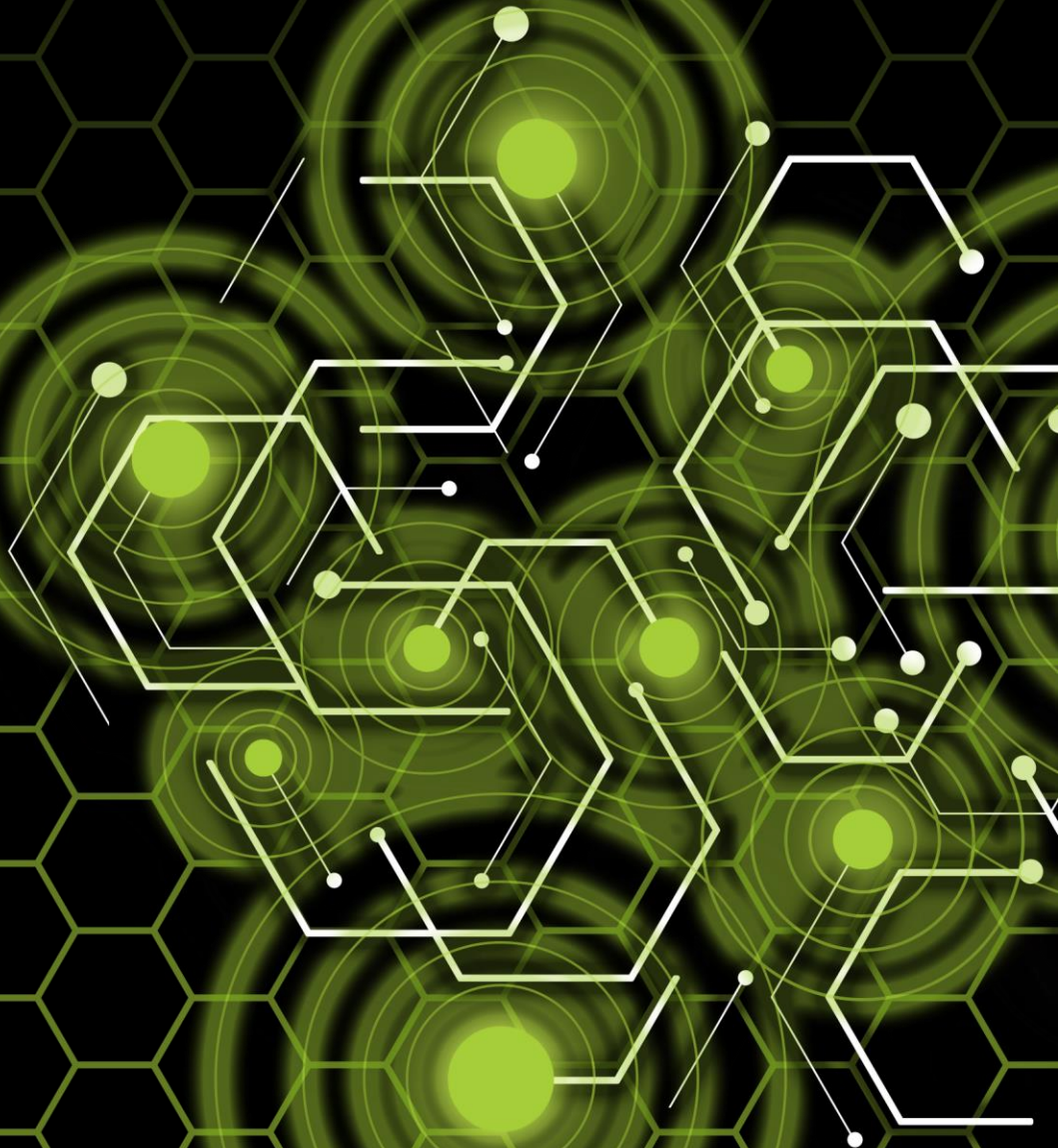


**HASCALL-DENKĒ**  
THE WORLD'S ANTENNA SOURCE.

# New Products

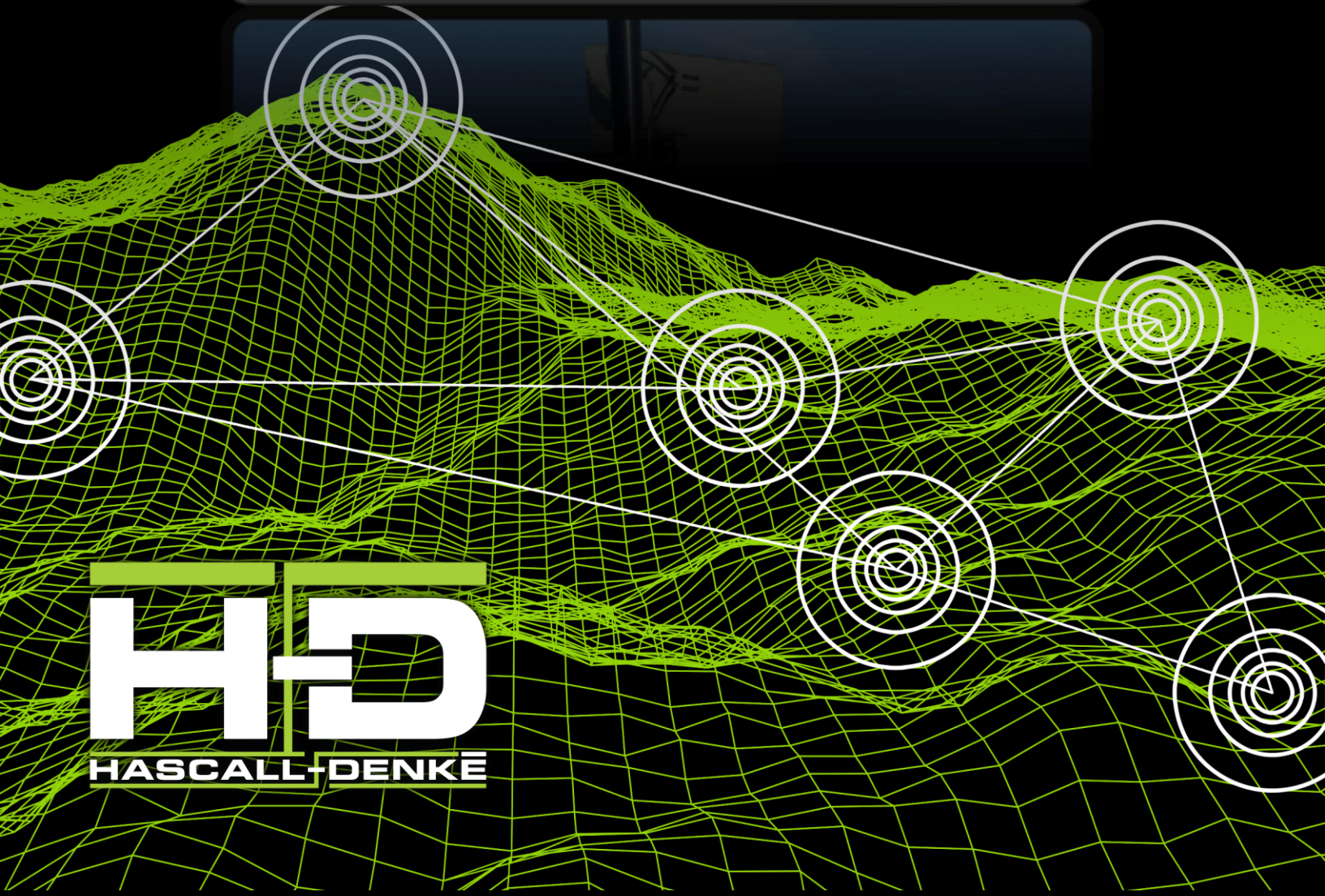
**You Deserve the Best  
“Expect Nothing Less”**







# Base Station



**HD**  
HASCALL-DENKE



# **Band 3 Vertical and Horizontal Polarized Panel Antenna**

The FXSP1.35-2.7-14-D features high gain, true dual polarization and wideband capabilities for superior performance and maximum reliability.

The antenna is designed to support Band 3 frequencies with high volume data rates, equal bit data streams and low BER. The antenna has two inputs, and housed in a UV stable polycarbonate radome and constructed with corrosion resistant materials for reliability in the most extreme environments.

## **Features**

- Point to Point (PTP)
- Dual Polarization
- Higher Spectral Efficiency
- Reduced Bit Error Rate (BER)

## **Electrical Specifications**

Frequency	1350-2700MHz
Polarization	Vertical and Horizontal
Impedance	50Ω
VSWR	2:1 Typical, 2.5:1 max
Gain	14.5-15.5dBi
Radiation Pattern @ Mid Band	Azimuth 30° Elevation 30°
Isolation	-36 to -40dB Avg.
Power	30 Watts max
Connector	(2) Type N Female

## **Mechanical Specifications**

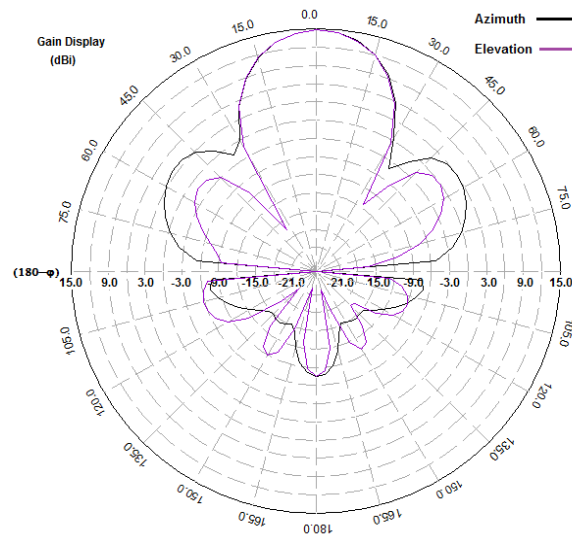
Design	Dipole
Height	12.9in W x 24.2"H
Radome	Polycarbonate
Mechanical Tilt	+15° to -25°
Weight	9.5lbs
Mount	Mast, Wall, or Special
Color	Black/Green/Tan/Grey/White

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

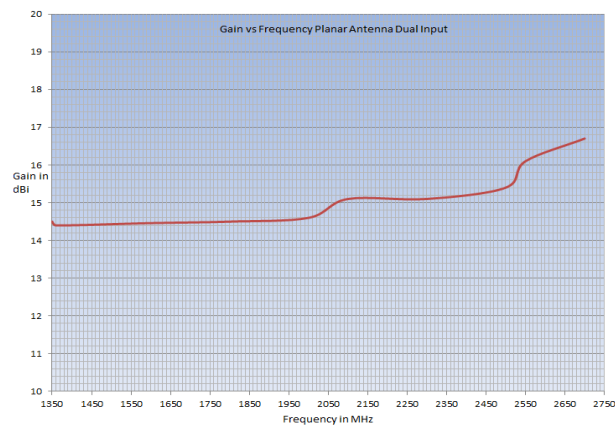
\*\*Specifications are subject to change without prior notice.



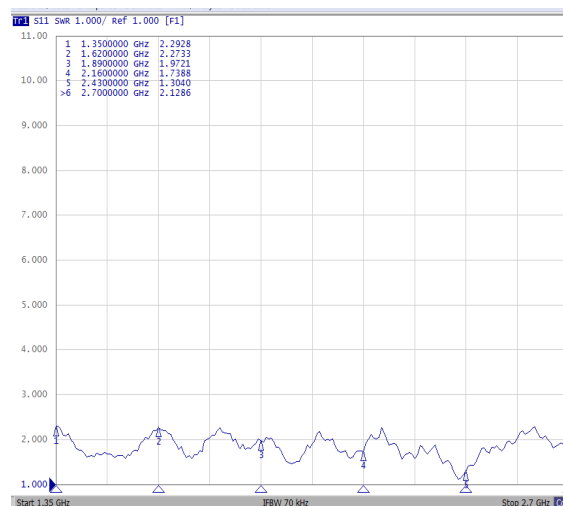
## Pattern



## Gain



## VSWR







**FXSP4.4-5.875-14-D**

**4400-5875 MHz**

**Dual Polarized 90° C-Band Sector**

The FXSP4.4-5.875-14-D features high gain, true dual polarization and broadband spectral capabilities for superior performance and maximum reliability.

This antenna operates in NATO Band 4 (C-band) and is designed for high volume data rates, equal bit data streams and low BER. The antenna has two inputs, and housed in a UV stable polycarbonate radome and constructed with corrosion resistant materials for reliability in the most extreme environments.

### Features

- Designed for High Capacity Line of Sight (HCLOS)
- Horizontal and Vertical Polarization
- Reduced Latency
- Reduced Bit Error Rate (BER)
- NATO Band 4 (C-band)

### Electrical Specifications

Frequency	4400-5875 MHz
Polarization	Vertical and Horizontal
Impedance	50 $\Omega$ Nominal
VSWR	< 2.0:1 Typical
Gain	See Table
Radiation Pattern	Azimuth 90° Elevation 16°
Isolation	32-40 dB
Power	30 Watts max
Connector	(2) Type N Female

### Mechanical Specifications

Design	Sector Panel
Height	31.5"(h) X 5.5"(w) X 2.5"(d)
Radome	Polycarbonate
Mechanical Tilt	+15° / -25°
Weight	3.7 lbs (.45kg)
Mount	HDM013 Sector Mount Sold Separately (1.5" - 2" Pipe)
Color	Black/Green/Tan/Grey/White

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.



**Made in the USA**

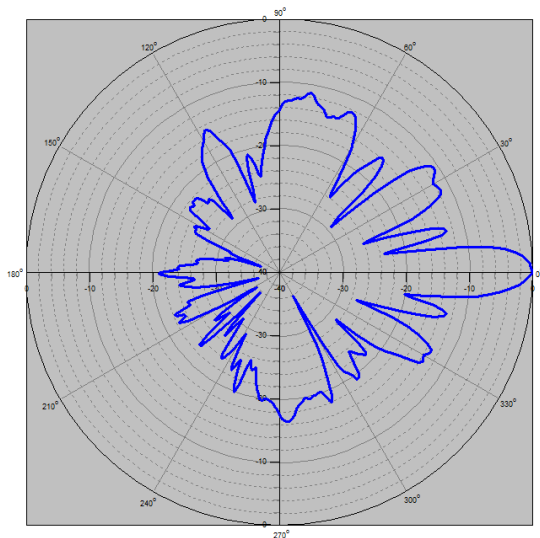
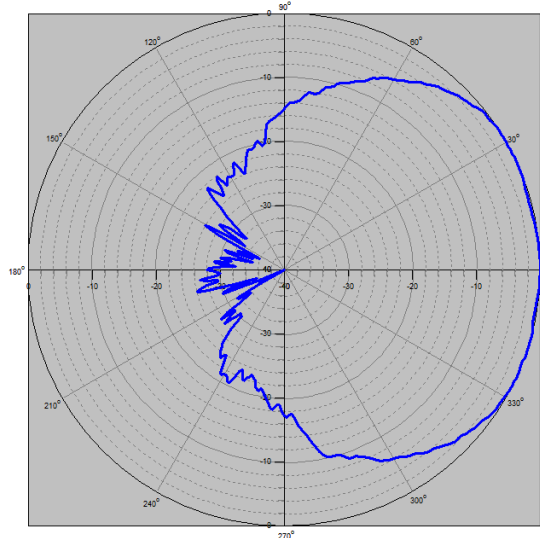
**[www.hascall-denke.com](http://www.hascall-denke.com)**

**1Y31050**

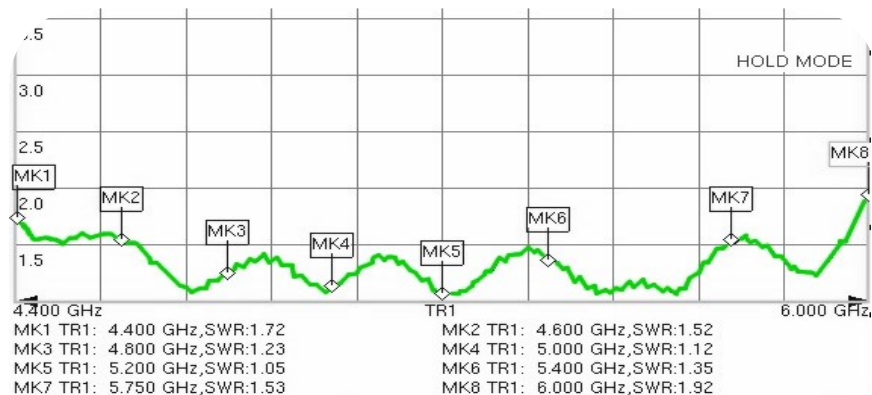
**ISO 9001 Certified  
Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**



**Elevation Pattern**

**Azimuth Pattern**

**Gain Table**

4.4—5.5 GHz	12 dBi $\pm$ .5
4.5—4.6 GHz	11 dBi $\pm$ 1
4.7—4.8 GHz	10 dBi $\pm$ 1
4.9—5.0 GHz	12.5 dBi $\pm$ .5
5.0—5.5 GHz	14 dBi $\pm$ .5
5.5—6.0 GHz	13.5 dBi $\pm$ .5

**VSWR**


The FXDP117-138 antenna was designed for today's latest VHF-AM communications platforms for military, commercial, and law enforcement applications.

The radiator element is designed for maximum durability and performance. The antenna radiator is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	117-138MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2:1 Typical
Gain	≥ 2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	200 Watts CW
Connector	Type N Female

### Mechanical Specifications

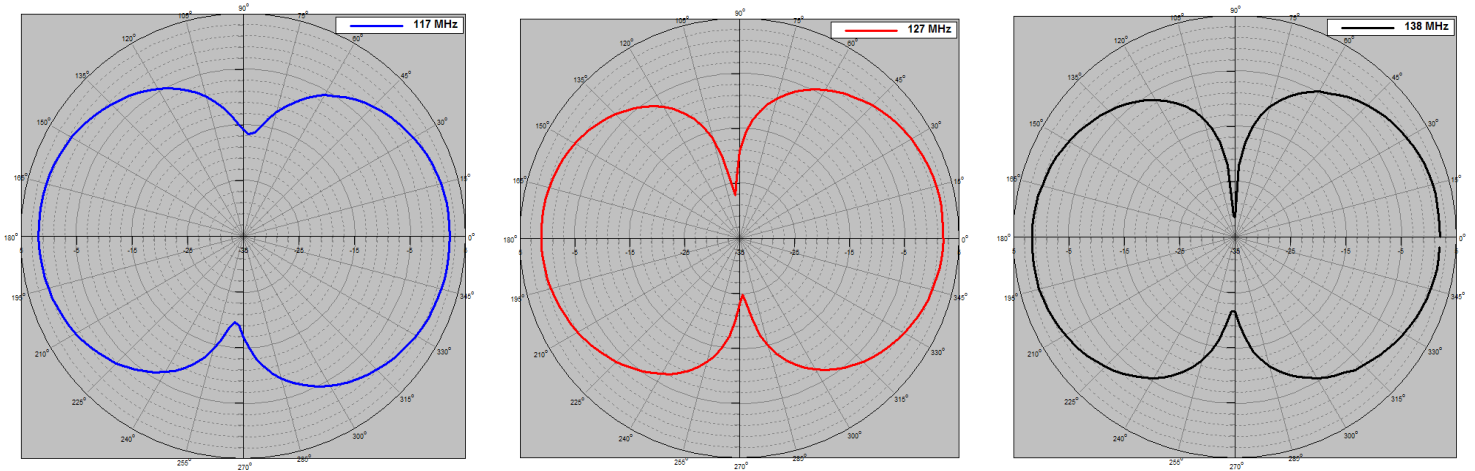
Design	Dipole
Height	50.5in. (1.3m) w/o extension
Diameter	2¼in. (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread Extension
Temp	-40 to 185° F (-40 to 85°C)
Color	White/Black/Green/Tan/Grey



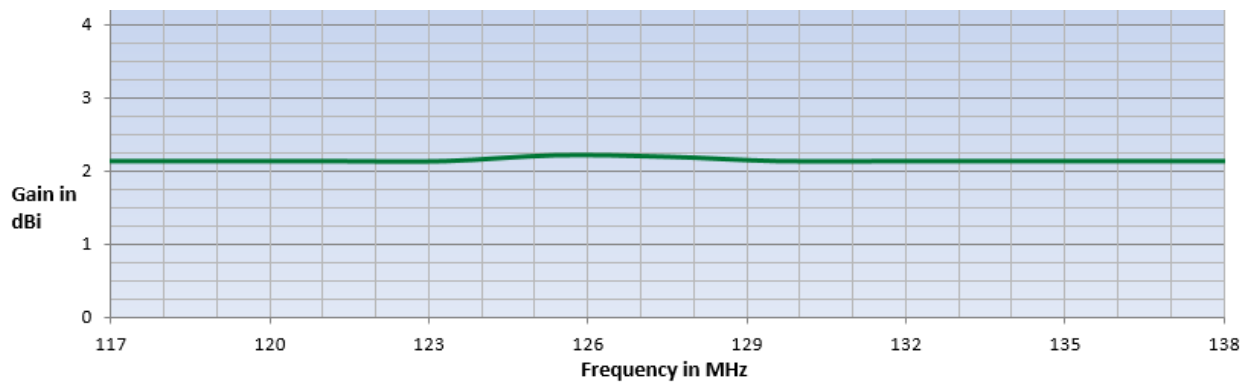
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**\*\*Specifications are subject to change without prior notice.**

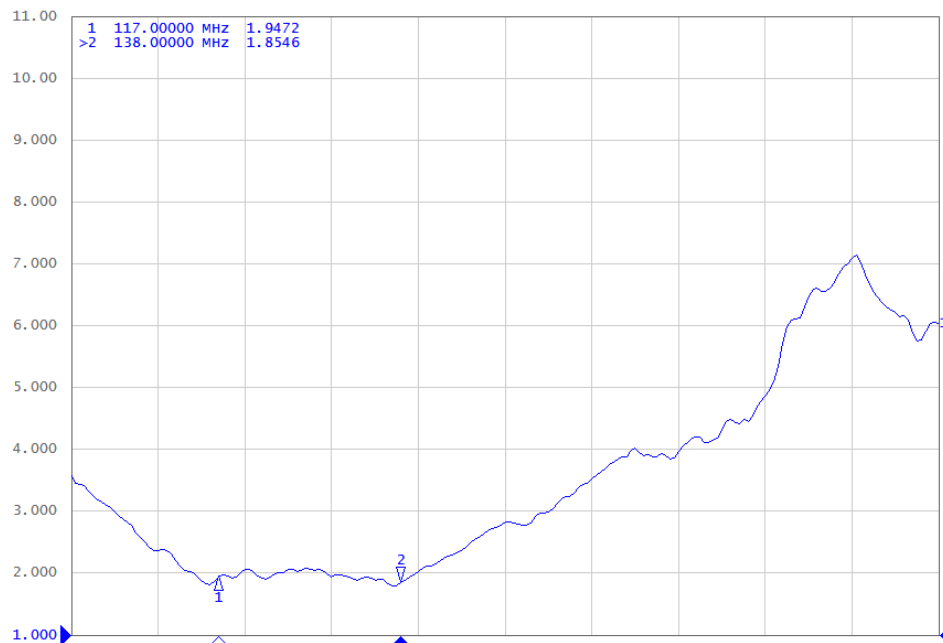
## Patterns



## Gain



## VSWR





The FXDP150/450/818 is a full spectrum multiband VHF, UHF-H, 700/800/900MHz antenna designed for today's latest Land Mobile Radios (LMR) for maritime, military, commercial, public safety and law enforcement applications

The radiator elements are designed for maximum durability and performance. The antenna radiator is sealed in heavy duty fiberglass for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

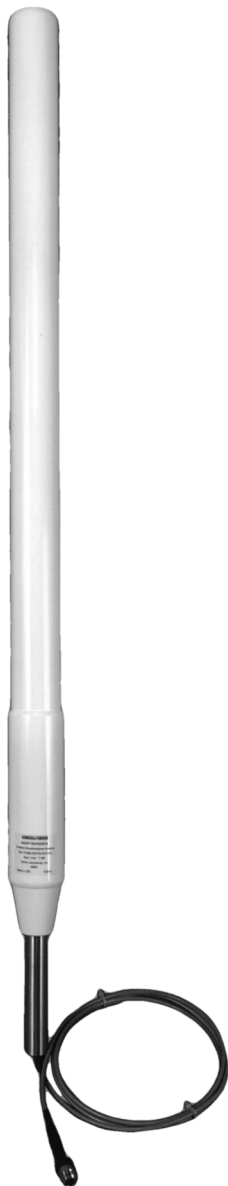
Frequency	136-174MHz 380-520MHz 762-960MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2.5:1 operational <3.0:1 Max
Gain	Unity to +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	100 Watts
Connector	12" pigtail w/Type N Female

### Mechanical Specifications

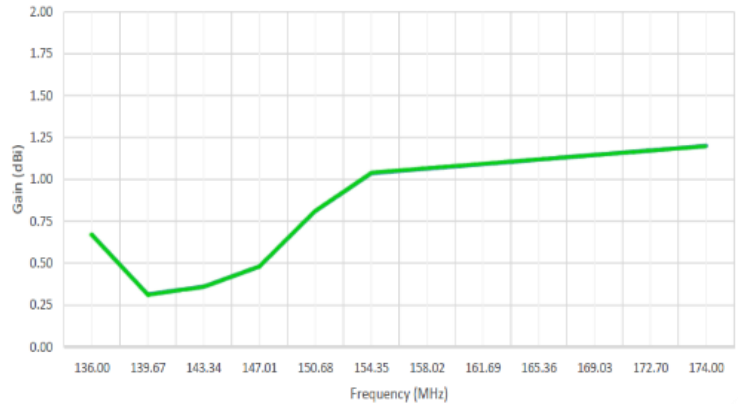
Design	Dipole
Height	41.25in. (1.05m)
Diameter	2¼" (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread—Extension sold separate
Color	White/Black/Green/Tan/Grey

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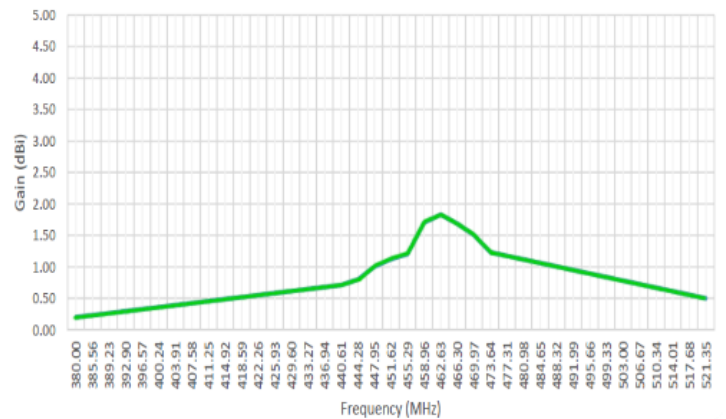
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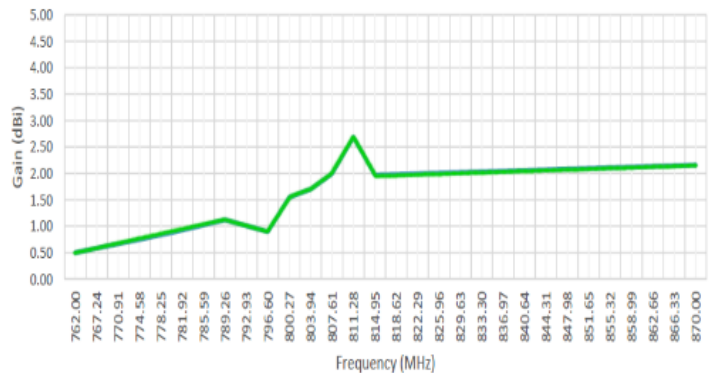
## Gain Pattern 136-174MHz



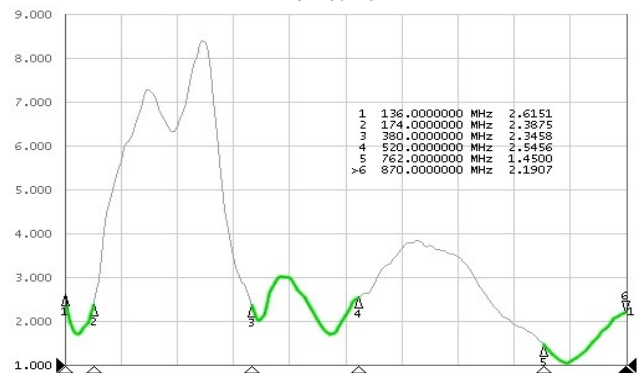
## Gain Pattern 380-520MHz



## Gain Pattern 762-870MHz



## VSWR



The FXDP150/450/818AB is a full spectrum multiband VHF, UHF-H, 700/800/900MHz antenna designed for today's latest Land Mobile Radios (LMR) for maritime, military, commercial, public safety and law enforcement applications

The radiator elements are designed for maximum durability and performance. The antenna radiator is sealed in heavy duty fiberglass for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	136-174MHz 380-520MHz 762-960MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2.5:1 operational <3.0:1 Max
Gain	Unity to +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	100 Watts
Connector	12" pigtail w/Type N Female

### Mechanical Specifications

Design	Dipole
Height	41.25in. (1.05m)
Diameter	2¼" (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread—Extension sold separate
Color	White/Black/Green/Tan/Grey

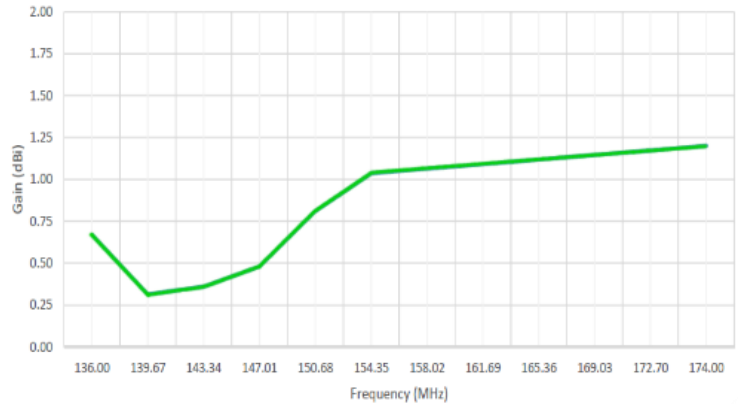
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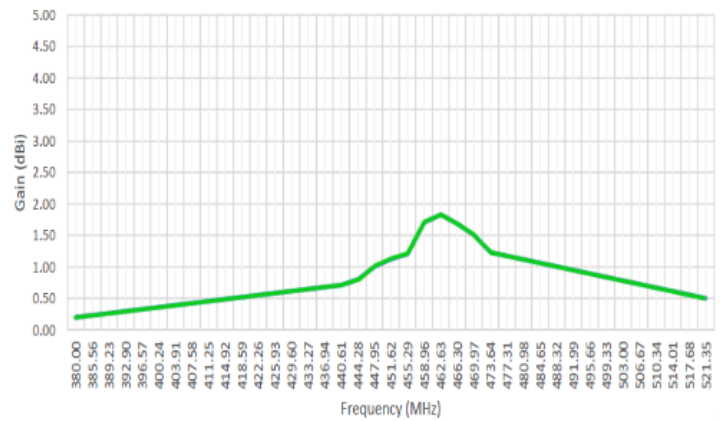
#### Gain Pattern

#### 136-174MHz



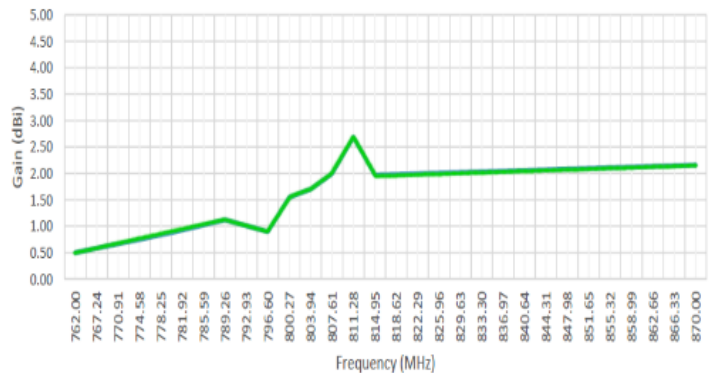
#### Gain Pattern

#### 380-520MHz

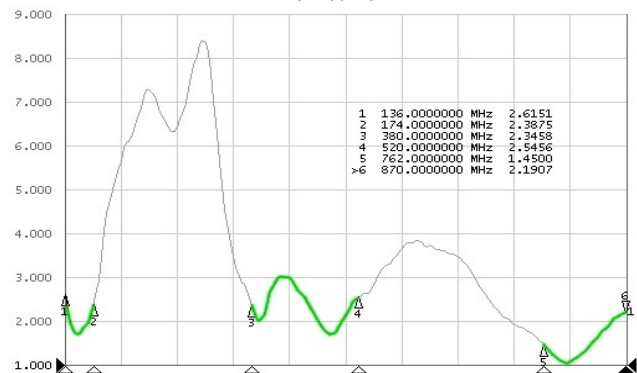


#### Gain Pattern

#### 762-870MHz



#### VSWR





The TDMP225-400 antenna was designed for mast mounting or suspension mounted for tactical deployment without a mast. The antenna features foldable ground radials for easy storage.



### Features

- Collapsible System
- Setup/Tear Down < 30 Seconds
- Integrated Ground Plane
- No Tools Required

### Electrical Specifications

Frequency	225-400 MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	< 2:1
Gain	2.5 dBi Typical
Radiation Pattern	Azimuth 360° Elevation 70°
Power	25 Watts
Connector	TNC Male Rotating

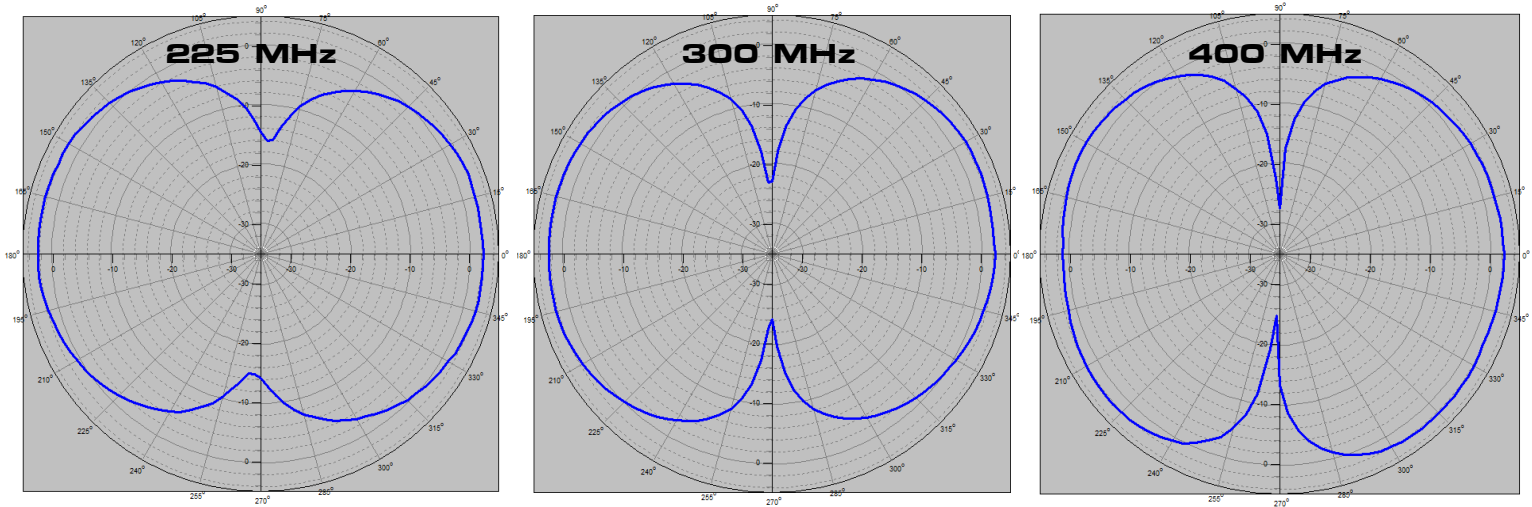
### Mechanical Specifications

Design	Monopole
Height	26 inches
Radome	Fiberglass
Weight	4.5 lbs
Mount	Mast
Color	Black or Olive Drab

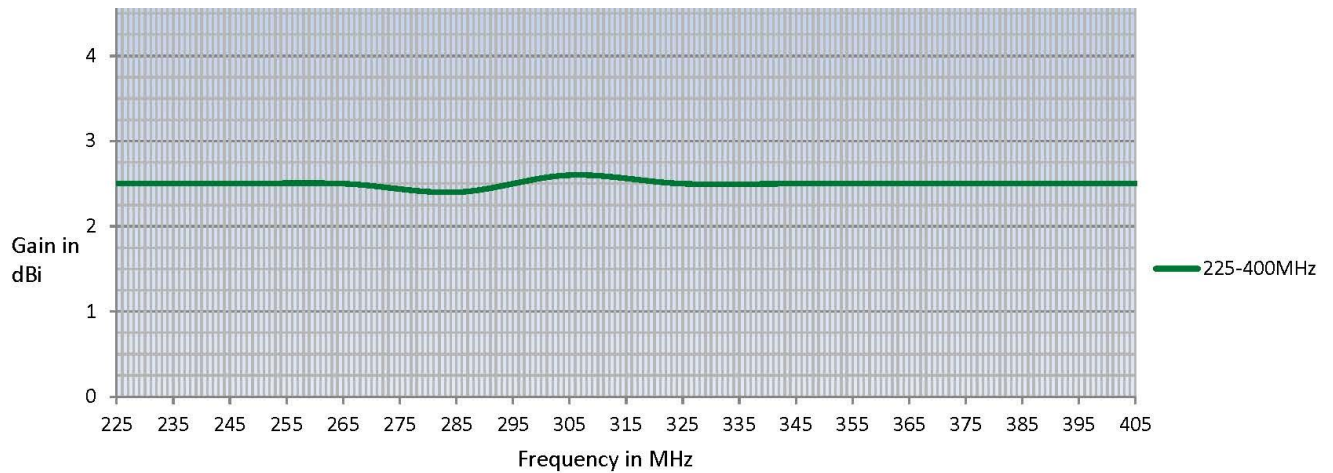
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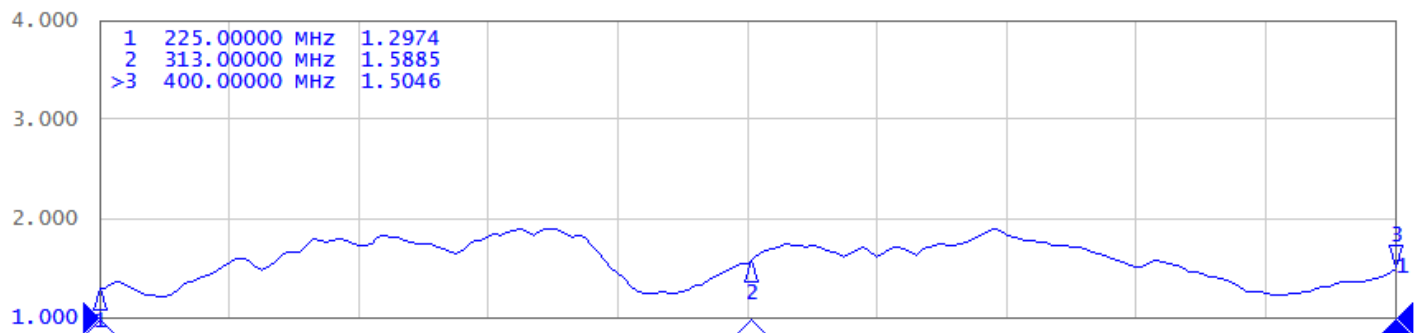
#### Pattern



#### Gain



#### VSWR



**FXDP1350-2700-D****1350-2700-D MHz****Dual Polarization Omnidirectional Antenna**

The FXDP1350-2700-D is designed to work with all radios operating from 1350-2700 MHz. This Band 3/3+ antenna is designed to maximize performance for HCLOS (High Capacity Line of Sight) and TRILOS (Terrestrial Transmission Line of Sight) Radios.

Robust and tough, this antenna is housed in a fiberglass and polycarbonate radome and is constructed from corrosion resistant materials for reliability in the harshest environments.

**Features**

- Ideal for HCLOS & TRILOS radios
- Dual Polarization
- Ground Plane Independent

**Electrical Specifications**

Frequency	1350-2700 MHz
Polarization	Dual Horizontal & Vertical
Impedance	50 $\Omega$ Nominal
VSWR	3.0:1 Maximum
Gain	0.0 ~ 2.0 dBi +/- .5
Radiation Pattern	Azimuth 360° Elevation 68°
Isolation	34 ~ 45 dB Typical
Power	25 Watts
Connector	(2) Type N Female

**Mechanical Specifications**

Design	Dipole
Height	24 in (.61 m)
Radome	2.75 in Dia (70 mm)
Weight	3.5 lb. (1.59 kg)
Mount	Pipe Mount Using UM007, UM007T, or UM015
Color	Black/Green/Tan/Grey



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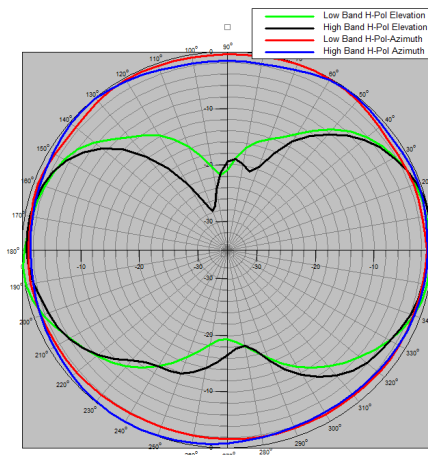
**ISO 9001 Certified**  
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**12285 U.S. Highway 41 N., Palmetto, FL 34221**  
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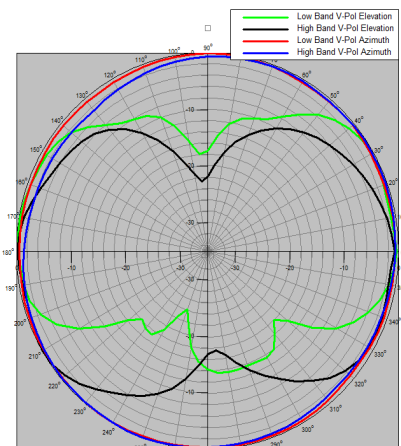


## Pattern

**HORIZONTAL ANTENNA PATTERN**



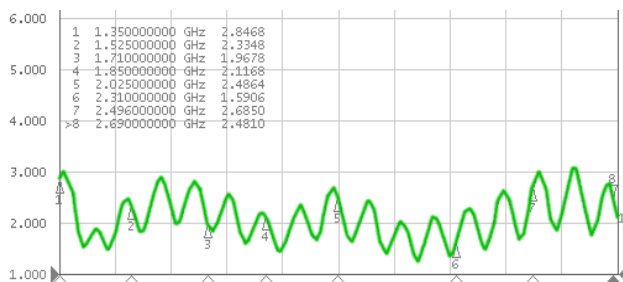
**VERTICAL ANTENNA PATTERN**



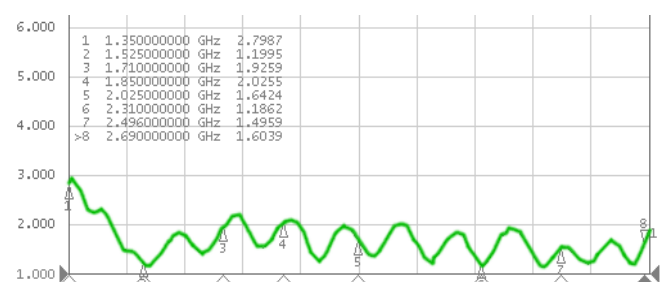
## Gain

## VSWR

**HORIZONTAL ANTENNA VSWR**



**VERTICAL ANTENNA VSWR**





The FXDP4.4-6.0-6-D is designed to work with all radios operating from 4.4-6.0 GHz. This Band 4 antenna is designed to maximize performance for HCLOS (High Capacity Line of Sight) and TRILOS (Terrestrial Transmission Line of Sight) Radios.

Robust and tough, this antenna is housed in a polycarbonate radome and is constructed from corrosion resistant materials for reliability in the harshest environments.

### Features

- Ideal for HCLOS & TRILOS radios
- Dual Polarization
- Ground Plane Independent

### Electrical Specifications

Frequency	4400-6000 MHz
Polarization	Dual (Horizontal & Vertical)
Impedance	50 $\Omega$ Nominal
VSWR	2:1 Maximum
Gain	> 6 dBi
Radiation Pattern @ Mid Band	Azimuth 360° Elevation 24°
Power	25 Watts
Connector	(2) Type N Female

### Mechanical Specifications

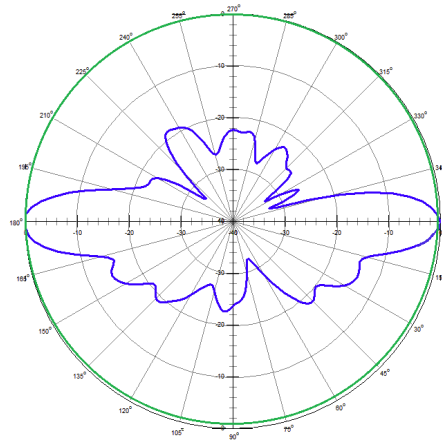
Design	Dipole
Height	17.5 in. (0.45 m)
Radome	2.75 in. Dia (70 mm)
Weight	3.1 lb. (1.41 kg)
Mount	Pipe Mount using UM007, UM007T, or UM015
Color	Black/Green/Tan/Grey



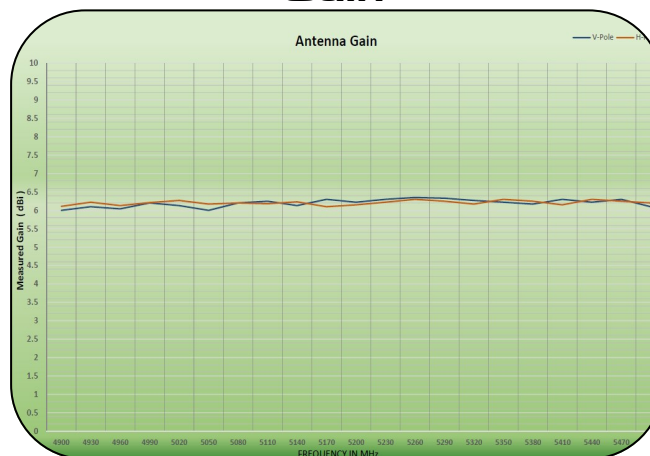
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**\*\*Specifications are subject to change without prior notice.**

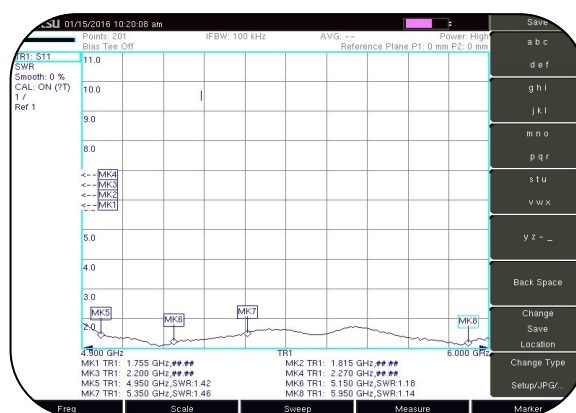
## Pattern



## Gain



## VSWR



# Manpack



**HD**  
HASCALL-DENKE







# HD-BAK-1 HD-BAK-1AB Banded Antenna Kit

The Hascall-Denke Banded Antenna Kit (HD-BAK) was designed to give radio operators more flexibility in congested and contested Radio Frequency (RF) environments. The antennas cover L/UHF - U/UHF L and S bands.

The antennas in the kit are optimized specifically for the TSM-X™ waveform maximizing reliable throughput and extended range. The HD-BAK supports the TW-950/900, AN/PRC-163, AN/PRC-148C IMBITR and other Mobile Ad-Hoc Networking (MANET) radios.

## Features

- Use on multiple radio platforms
- Operator flexibility
- Optimized performance
- Extended range



**\*\*All information on this product and the product itself is the property of  
and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

**Made in the USA**

**[www.hascall-denke.com](http://www.hascall-denke.com)**

**1Y45350 / 1Y45350A**

**ISO 9001 Certified  
Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**





**HD-BAK-1**  
**HD-BAK-1AB**  
**Banded Antenna Kit**

**Kit Consists of:**

Part #	Model Number	Frequency	VSWR	Gain	Design
1Y43300	MPDP1.25-1.45-4	1250-1450MHz	<2:1	4dBi	Dipole
1Y43350	MPDP 1.75-1.85-4	1750-1850MHz	<2:1	4dBi	Dipole
1Y43400	MPDP2.2-2.35-4	2200-2350MHz	<2:1	4dBi	Dipole
1Y38700	MPDP675X4	675-2600MHz	2.5: 1Max	0-2dBi	Dipole
1Y38350	MPMP225X2AD	225-450MHz	3.0:1 Max	1.5 - 2dBi	Monopole

**Specifications when stowed**

Length	~ 17.5"
Width	~ 2.5"
Weight	1.8Lb

Bag Color	Part Number	Model Number
Black	1Y45350	HD BAK-1
Coyote Brown	1Y45350A	HD BAK-1AB

\*\* Bag—Berry Compliant

\*\* Antennas—Designed and Manufactured in the USA

**Made in the USA**

[www.hascall-denke.com](http://www.hascall-denke.com)

**1Y45350 / 1Y45350A**

**ISO 9001 Certified**  
**Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221**  
**1-800-473-2139**







# HD-BAK-2 HD-BAK-2AB Banded Antenna Kit

The Hascall-Denke Banded Antenna Kit (HD-BAK) was designed to give radio operators more flexibility in congested and contested Radio Frequency (RF) environments. The antennas cover U/UHF L and S bands.

The antennas in the kit are optimized specifically for the TSM-X™ waveform maximizing reliable throughput and extended range. The HD-BAK supports the TW-950/900, AN/PRC-163, AN/PRC-148C IMBITR and other Mobile Ad-Hoc Networking (MANET) radios.

## Features

- Use on multiple radio platforms
- Operator flexibility
- Optimized performance
- Extended range



**\*\*All information on this product and the product itself is the property of  
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**Made in the USA**

**[www.hascall-denke.com](http://www.hascall-denke.com)**

**1Y45400 / 1Y45400A**

**ISO 9001 Certified  
Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**





**HD-BAK-2**  
**HD-BAK-2AB**  
**Banded Antenna Kit**

**Kit Consists of:**

Part #	Model Number	Frequency	VSWR	Gain	Design
1Y43300	MPDP1.25-1.45-4	1250-1450MHz	<2:1	4dBi	Dipole
1Y43350	MPDP 1.75-1.85-4	1750-1850MHz	<2:1	4dBi	Dipole
1Y43400	MPDP2.2-2.35-4	2200-2350MHz	<2:1	4dBi	Dipole
1Y38700	MPDP675X4	675-2600MHz	2.5: 1Max	0-2dBi	Dipole
1Y35100	MPDP1755-1815/2200-2270-4	1755-1810/2200-2270MHz	<2:1	4dBi	Dipole

**Specifications when stowed**

Length	~ 17.5"
Width	~ 2.5"
Weight	1.9Lb

Bag Color	Part Number	Model Number
Black	1Y45350	HD BAK-2
Coyote Brown	1Y45350A	HD BAK-2AB

\*\* Bag—Berry Compliant

\*\* Antennas—Designed and Manufactured in the USA

**Made in the USA**

[www.hascall-denke.com](http://www.hascall-denke.com)

**1Y45400 / 1Y45400A**

**ISO 9001 Certified**  
**Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221**  
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**HD-BWAK675X4**

**HD-BWAC001**

## **Body Worn Antenna Kit**

The Hascall-Denke Body Worn Antenna Kit HD-BWAK675X4 was designed to give radio operators more flexibility in relocating their antenna from the radio.

The antenna supplied with the kit is optimized specifically for the TSM-X™ waveform maximizing reliable throughput and extended range. The HD-BWAK675X4 supports the TW-950/900, AN/PRC-163, AN/PRC-148C IMBITR and other Mobile Ad-Hoc Networking (MANET) radios.

The Hascall-Denke Body Worn Antenna Case HDBWAC001 is available for operators that have existing MPDP675X4 or BWDP675X4 antennas. The antenna case is supplied with a 3' TNC "M" to TNC "F" cable for easy antenna relocation.

### **HD-BWAK675X4**



### **HD-BWAC001**



**\*\*All information on this product and the product itself is the property of  
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**\*\*Specifications are subject to change without prior notice.**

**Made in the USA**

**[www.hascall-denke.com](http://www.hascall-denke.com)**

**1Y48700 /1Y48750**

**ISO 9001 Certified  
Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**





**HD-BWAK675X4**

**HD-BWAC001**

**Body Worn Antenna Kit**

**HD-BWAK675X4 Kit Consists of:**

BWDP675X4 Antenna
3' TNC "M" to TNC "F" cable
Antenna Case

Part #	Model Number	Color
1Y48750	HD-BWAK675X4	Black
1Y48750A	HD-BWAK675X4AB	Coyote Brown
1Y48750B	HD-BWAK675X4AC	OCP

**HD-BWAC001 Consists of:**

3' TNC "M" to TNC "F" cable
Antenna Case

Part #	Model Number	Color
1Y48700	HD-BWAC001	Black
1Y48700A	HD-BWAC001AB	Coyote Brown
1Y48700B	HD-BWAC001AC	OCP

\*\* Case—Berry Compliant

\*\* Antenna—Designed and Manufactured in the USA

**Made in the USA**

[www.hascall-denke.com](http://www.hascall-denke.com)

**1Y48700 /1Y48750**

**ISO 9001 Certified  
Form F042, Rev: A**

**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**



The MPMP225-380 antenna is designed with a state of the art matching unit for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- Flexible
- Lightweight
- Concealable

### Electrical Specifications

Frequency	225-380MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	+1.5 to +2dBi measured on 7.5" x 4" aluminum chassis
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	10 Watts
Connector	TNC-M

### Mechanical Specifications

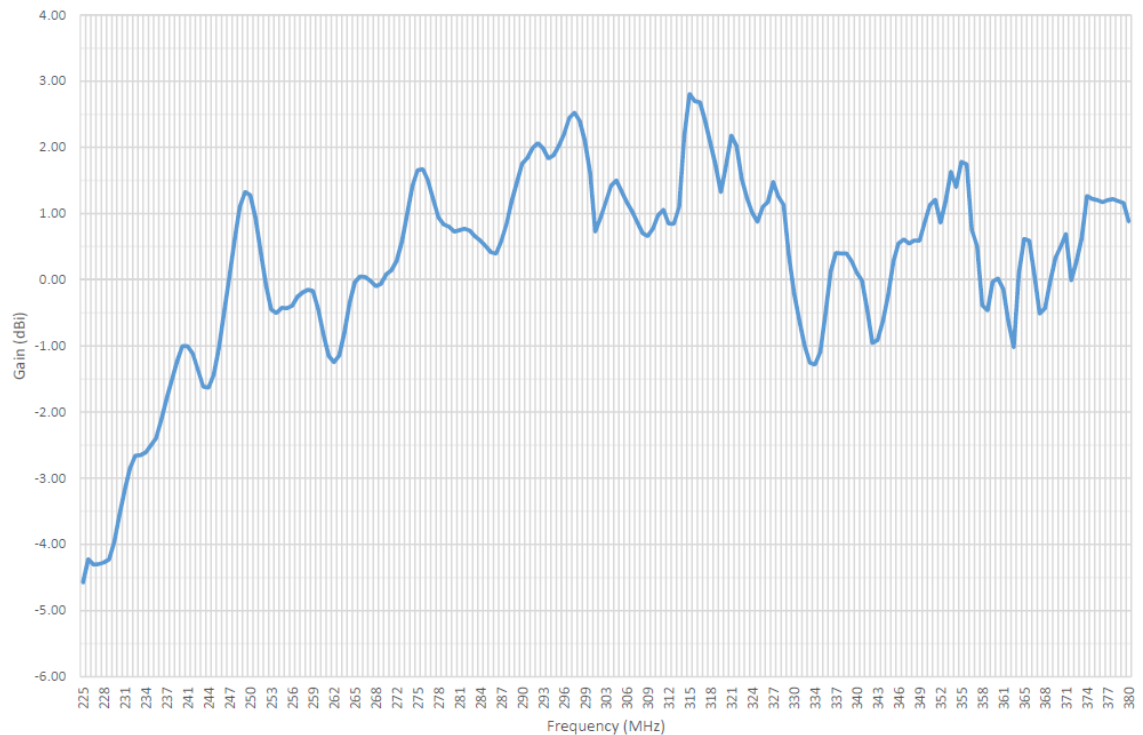
Design	Monopole
Height	12.25in.
Radome	Flexible Whip
Weight	1.52oz.
Color	Black

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.

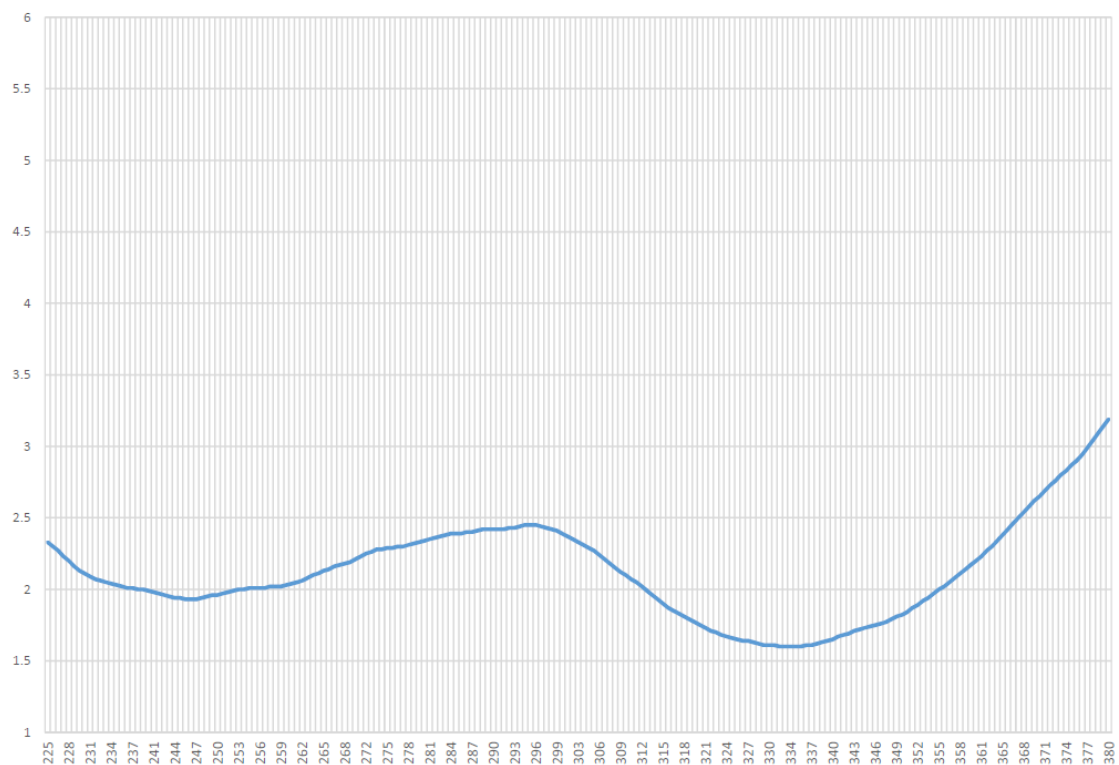
Antenna Comparison 225-380 MHz

**Gain**



MPMP250-380

**VSWR**





The MPMP225-380AM antenna is designed with a state of the art matching unit for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- Flexible
- Lightweight
- Concealable

### Electrical Specifications

Frequency	225-380MHz
Polarization	Vertical
Impedance	50Ω
VSWR	2.0:1 Max
Gain	-5 to +2dBi measured on 7.5" x 4" aluminum chassis
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	10 Watts
Connector	TNC-M

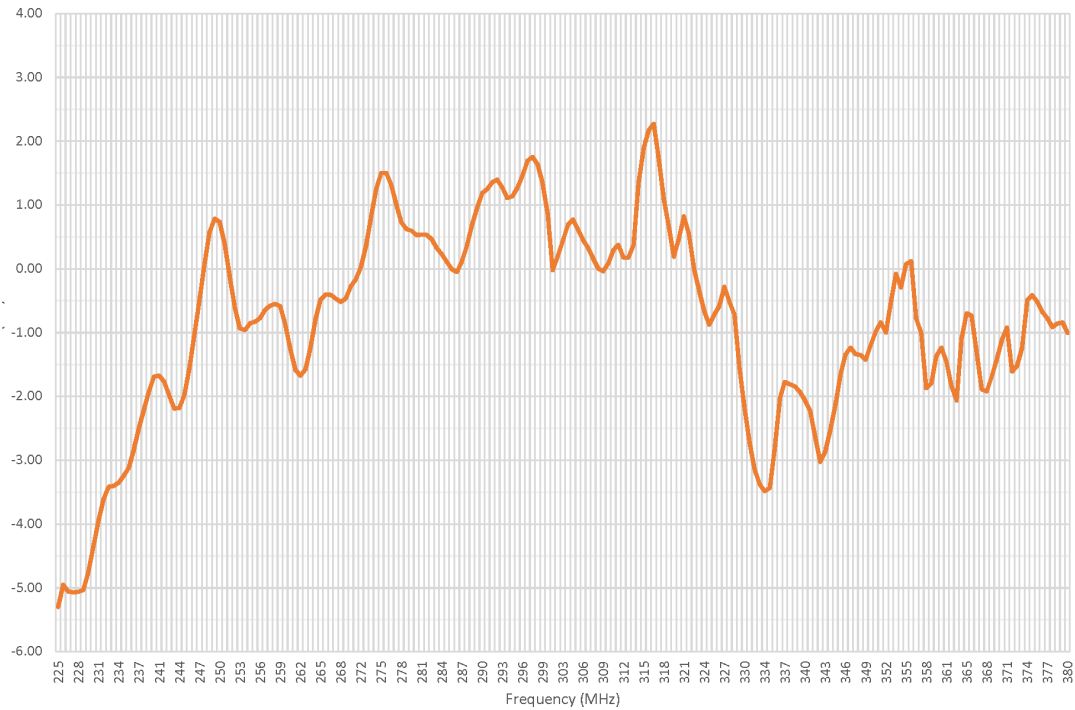
### Mechanical Specifications

Design	Monopole
Height	11.25in.
Radome	Flexible Whip
Weight	1.52oz.
Color	Black

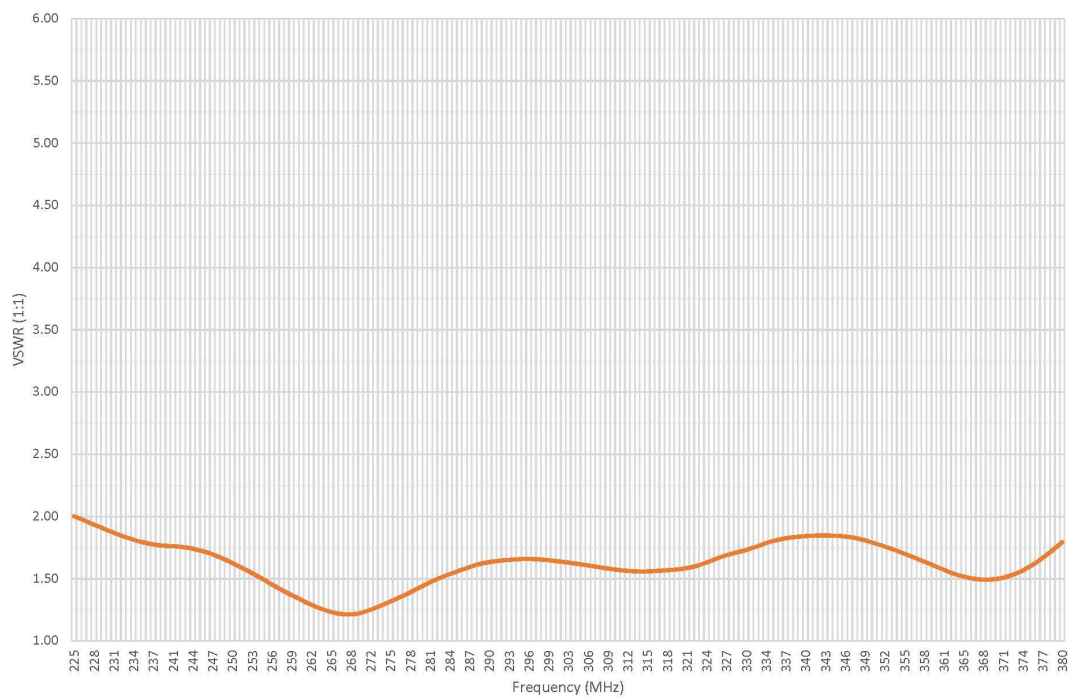
**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

**Gain**



**VSWR**



The MPMP225-4AD antenna is designed to be used with radio systems operating in the 225-450MHz band.

The antenna is designed with a state of the art matching unit for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- Lightweight
- Low Vertical Signature
- Adaptable to other platforms

### Electrical Specifications

Frequency	225-450MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	+1.5 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	10 Watts
Connector	TNC-M

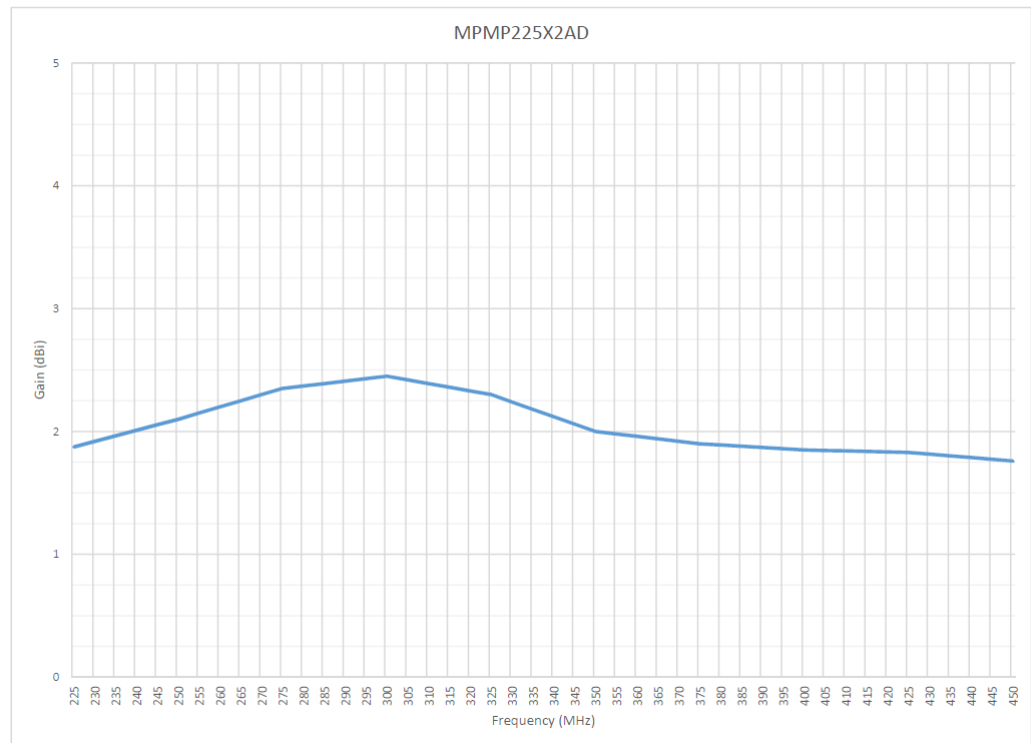
### Mechanical Specifications

Design	Monopole
Height	10.25in. (.26m)
Radome	Flexible Whip
Weight	2oz. (57g)
Color	Black

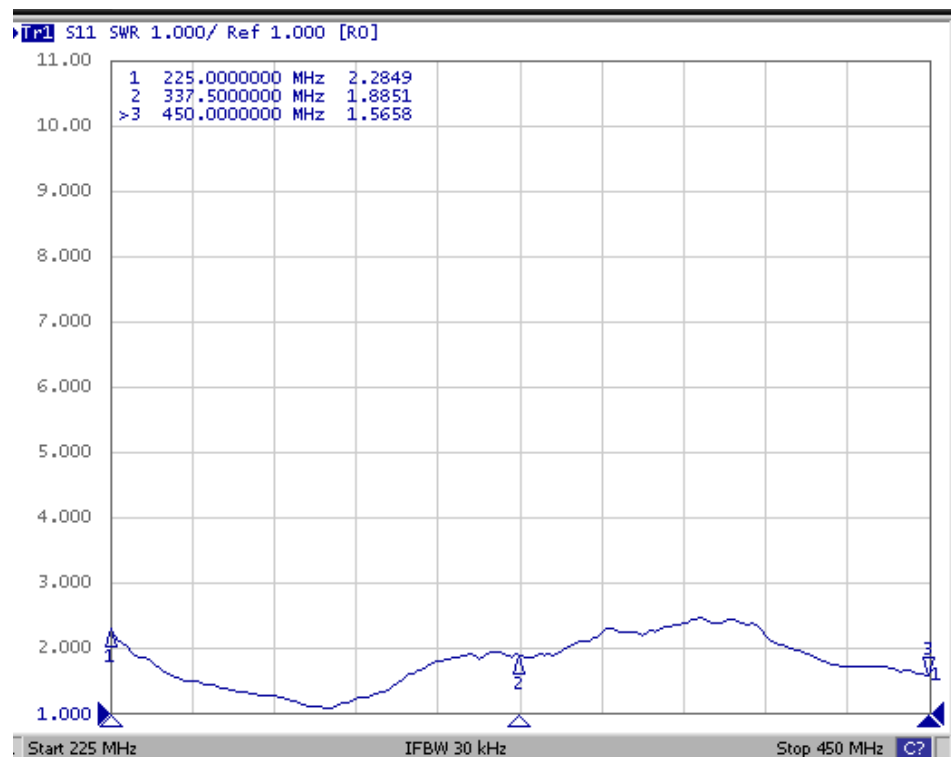
\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.

**Gain**



**VSWR**



The MPMP225-2AE antenna is designed to be used with radio systems operating in the 225-450MHz band.

The antenna is designed with a state of the art matching unit for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



Fully Extended

10"

Collapsed

5½"

### Features

- Flexible
- Lightweight
- Low Vertical Signature
- Adaptable to other platforms

### Electrical Specifications

Frequency	225-450MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	+1.5 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	10 Watts
Connector	TNC-M

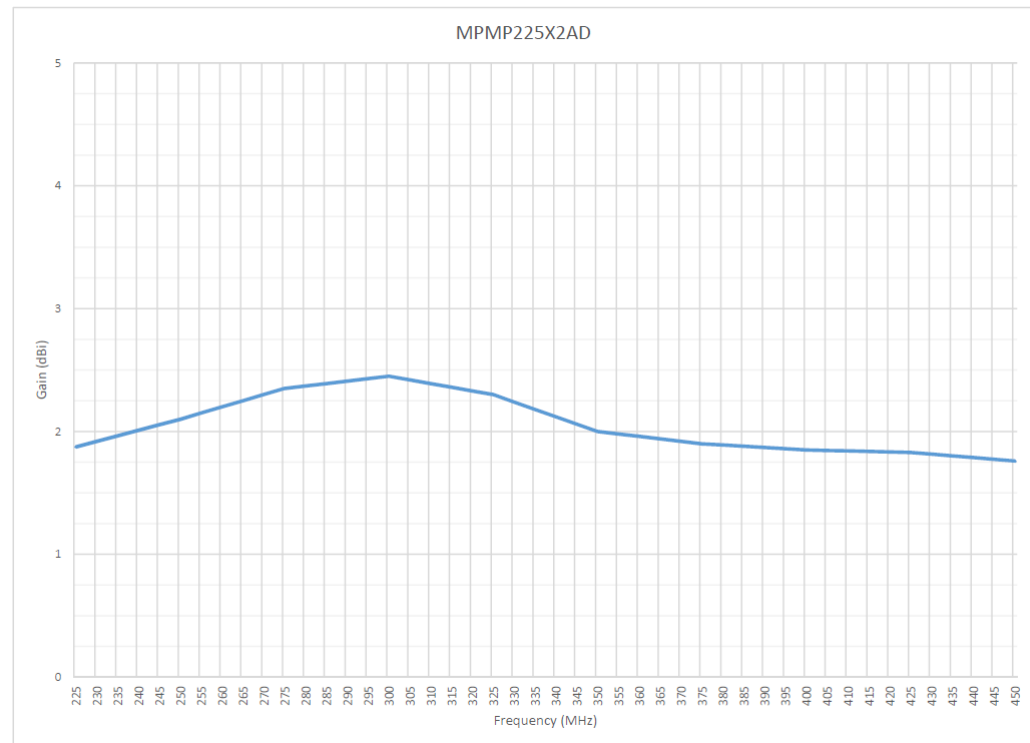
### Mechanical Specifications

Design	Monopole
Height	10in. (.3m)
Radome	Flexible Whip
Weight	2oz. (.06kg)
Color	Black

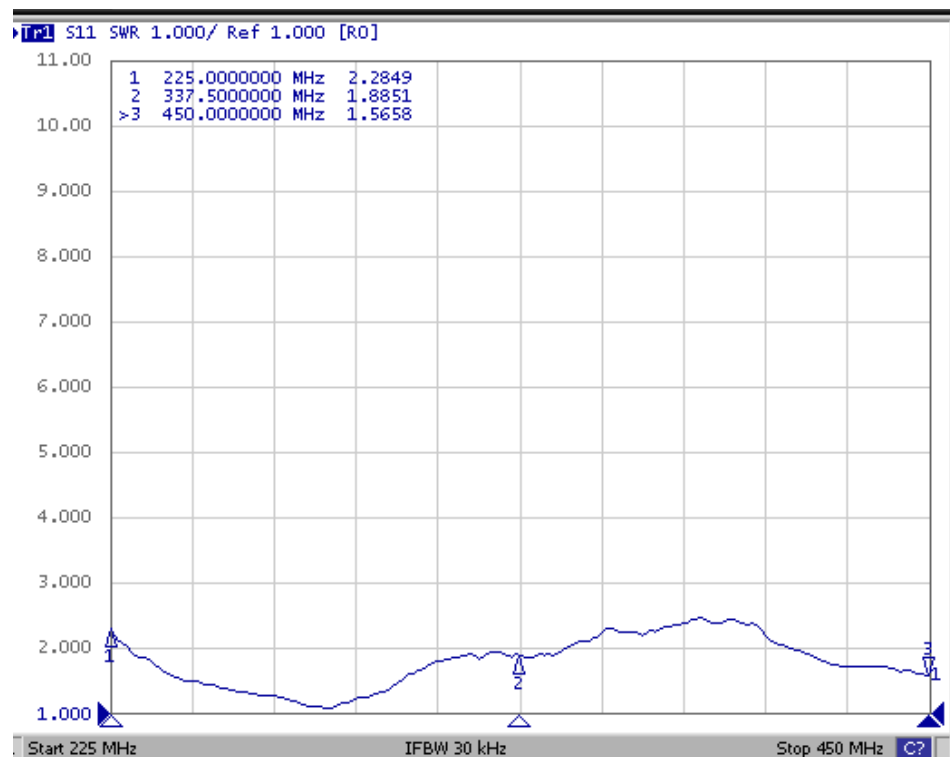
\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.

**Gain**



**VSWR**







**MPDP675X4**  
**675-2600MHz**

## **Handheld U/L/S Multi-Band Antenna**

The MPDP675X4 Multi-Band antenna is designed to be used with multiple radio and LTE/4G communications systems operating in the 675-2600MHz band with one input.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

### **Features**

- Broadband
- LTE/4G
- Low VSWR
- Adaptable to multiple communication platforms
- 360° Rotating Gooseneck

### **Electrical Specifications**

Frequency	675-2600MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	-1 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts PEP
Connector	TNC-M

### **Mechanical Specifications**

Design	Dipole
Height	11-3/8 in. (.29m)
Width	2.25in. (57mm)
Radome	Xenoy®
Weight	6oz. (170g)
Color	Black/Green/Tan/Grey

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.



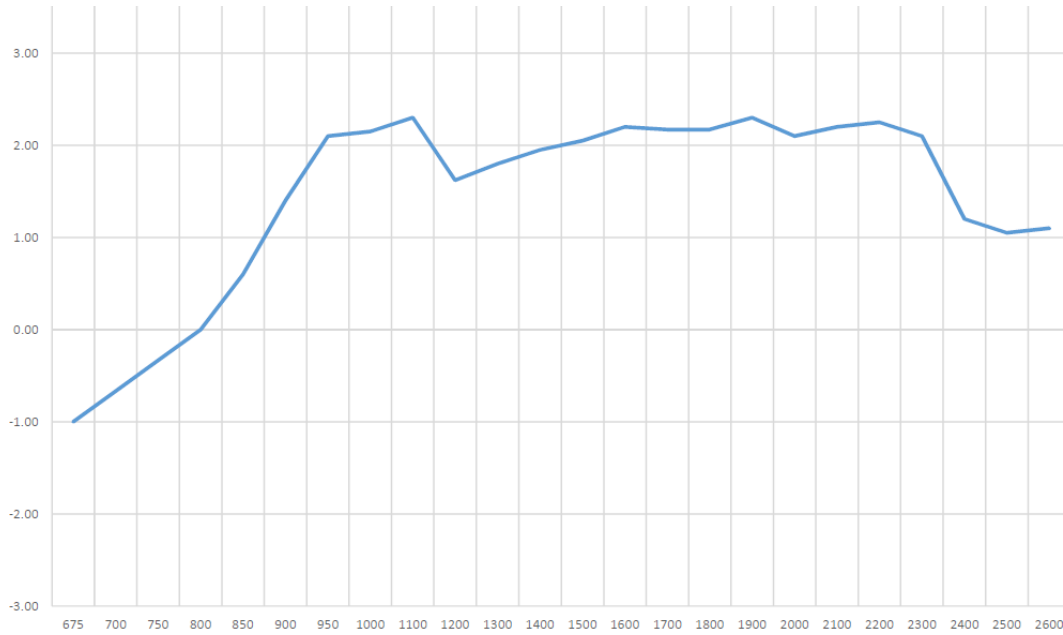
**Made in the USA**  
**ISO 9001 Certified**  
**Form F042, Rev: A**

**www.hascall-denke.com**  
**12285 U.S. Highway 41 N., Palmetto, FL 34221**  
**1-800-473-2139**

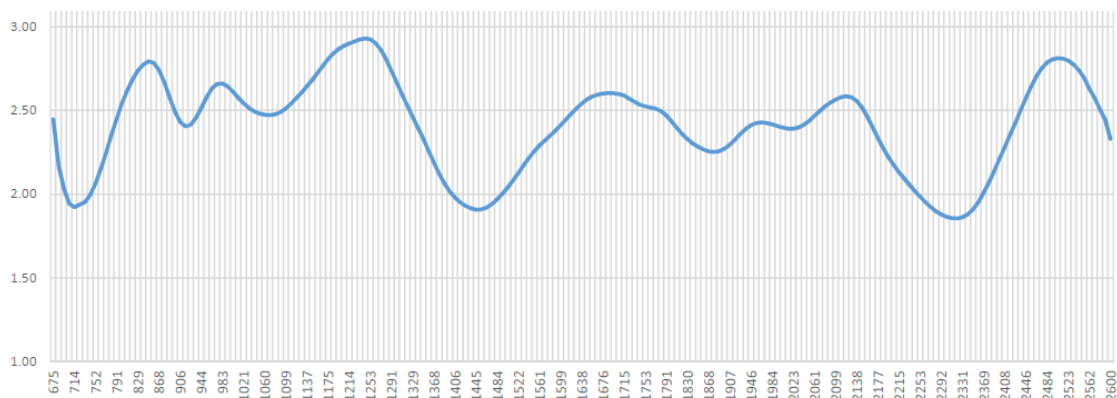
**1Y38700**



### Gain



### VSWR



The BWDP675X4 Multi-Band antenna is designed to be used with multiple radio and LTE/4G communications systems operating in the 675-2600MHz band with one input.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

### Features

- Broadband
- LTE/4G
- Low VSWR
- Adaptable to multiple communication platforms
- Detachable 3' Cable Included

### Electrical Specifications

Frequency	675-2600MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3:1 Max
Gain	-1 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts PEP
Connector	TNC-M

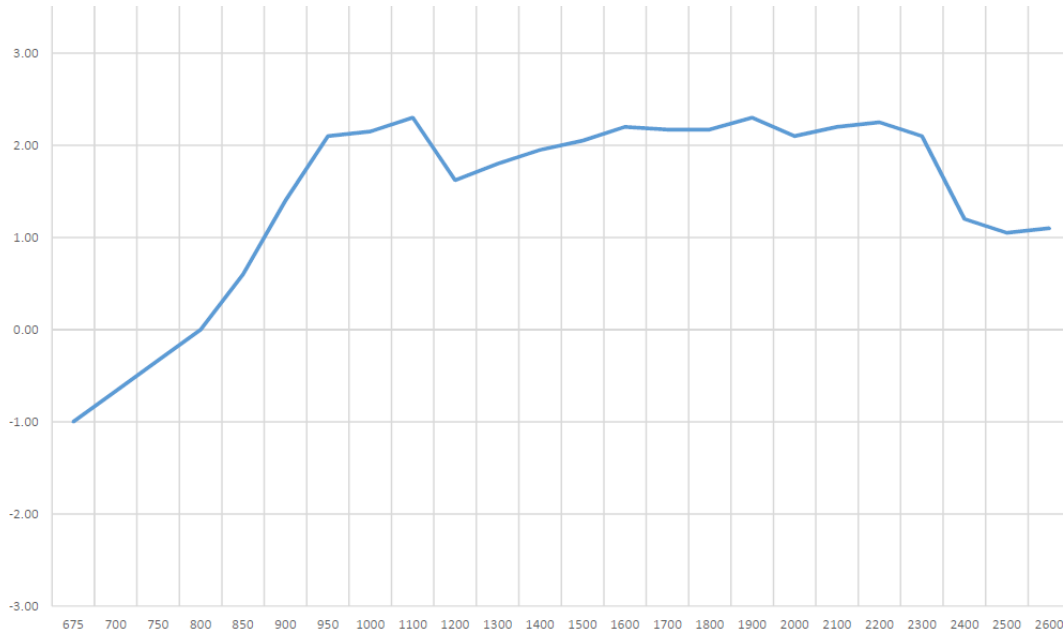
### Mechanical Specifications

Design	Dipole
Height	7.75 in. (197mm)
Width	2.25in. (57mm)
Radome	Xenoy®
Weight	.38lbs. Including Cable (.17kg)
Cable Length	38in (.97m)
Color	Black/Green/Tan/Grey

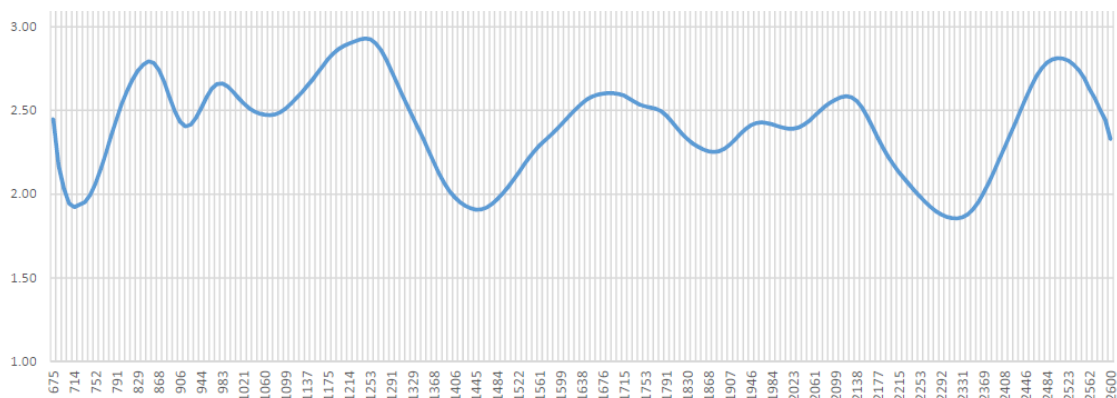
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\*\*Specifications are subject to change without prior notice.

### Gain



### VSWR





**BWDP675X4AB**

**675-2600MHz**

## **Bodyworn U/L/S Multi-Band Antenna**

The BWDP675X4AB Multi-Band antenna is designed to be used with multiple radio and LTE/4G communications systems operating in the 675-2600MHz band with one input.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### **Features**

- Broadband
- LTE/4G
- Low VSWR
- Adaptable to multiple communication platforms

### **Electrical Specifications**

Frequency	675-2600MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3:1 Max
Gain	-1 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts PEP
Connector	TNC-M

### **Mechanical Specifications**

Design	Dipole
Height	7.75 in. (197mm)
Width	2.25in. (57mm)
Radome	Xenoy®
Weight	.25lbs. (.11kg)
Color	Black/Green/Tan/Grey

**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

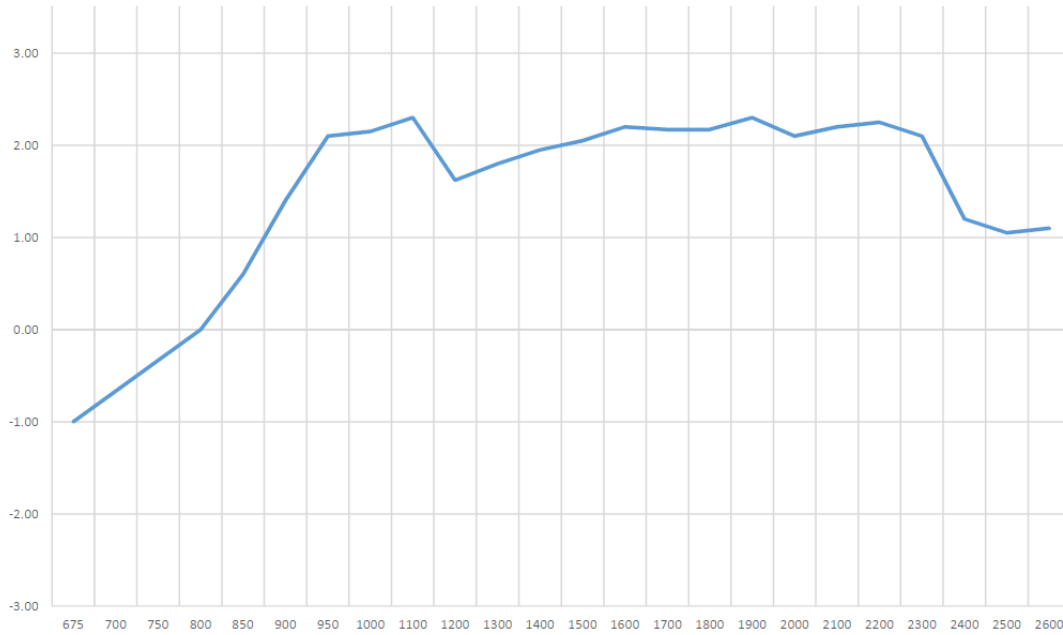
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ISO 9001 Certified  
Form F042, Rev: A**

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1-800-473-2139**

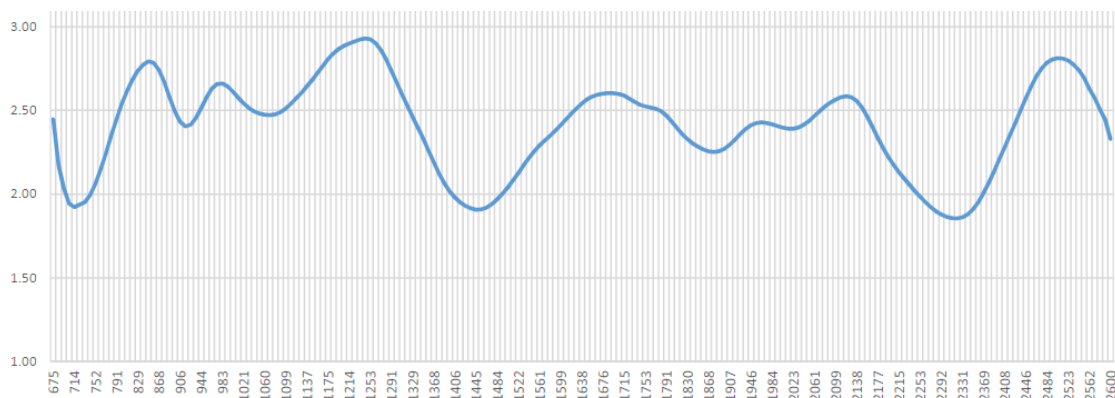
**1Y39400B**



## Gain



## VSWR





The MPDP675X4AB Multi-Band antenna is designed to be used with multiple radio and LTE/4G communications systems operating in the 675-2600MHz band with one input.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- Broadband
- LTE/4G
- Low VSWR
- Adaptable to multiple communication platforms
- 360° Rotating Gooseneck

### Electrical Specifications

Frequency	675-2600MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	-1 ~ +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts PEP
Connector	SMA-M

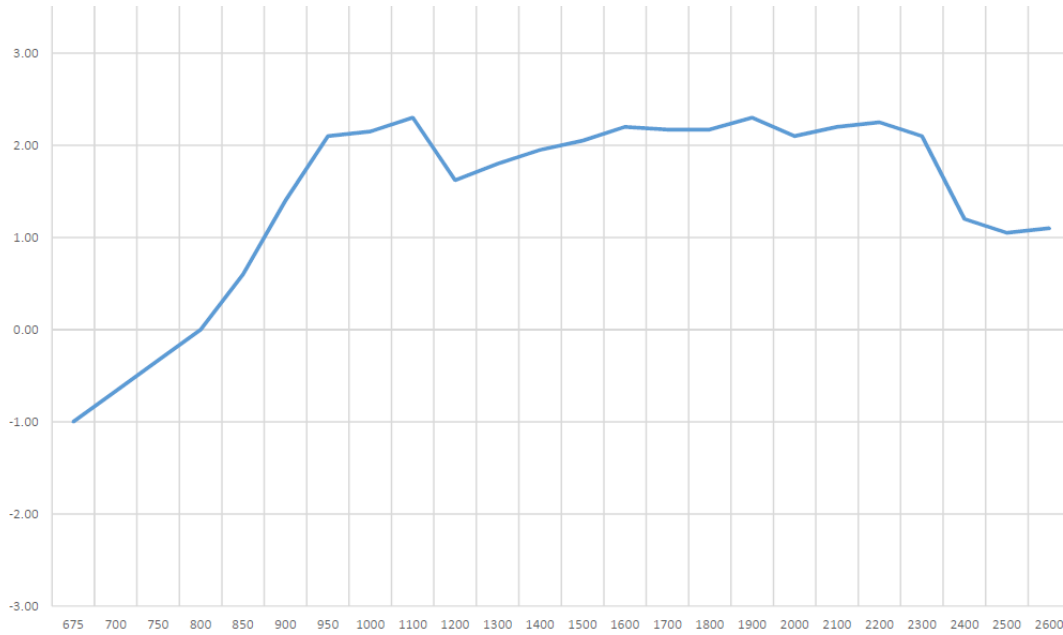
### Mechanical Specifications

Design	Dipole
Height	10-3/4 in. (.27m)
Width	2.25in. (57mm)
Radome	Xenoy®
Weight	5oz. (143g)
Color	Black/Green/Tan/Grey

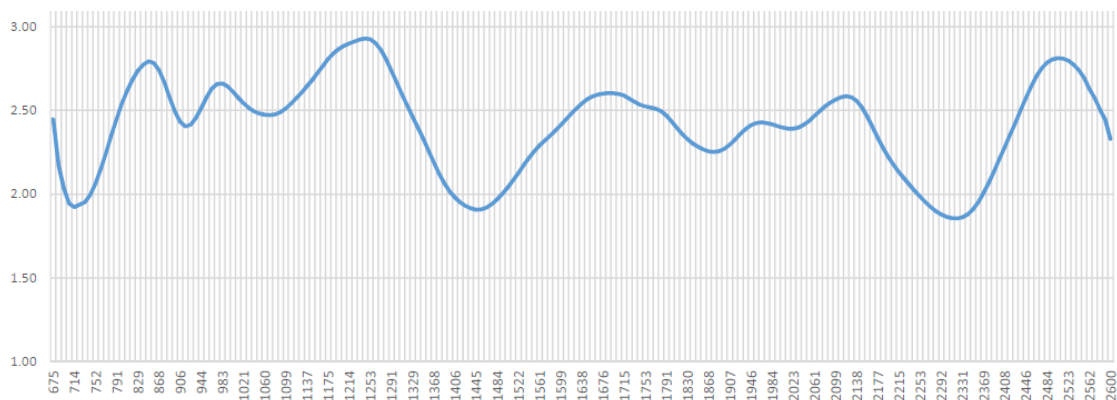
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\*\*Specifications are subject to change without prior notice.

### Gain



### VSWR





**MPDP700-800**

**700-800MHz**

## **Handheld/Manpack LTE Antenna**

The MPDP700-800 antenna was designed for today's latest Land Mobile Radio (LMR) and Long Term Evolution (LTE) communications platforms for military, commercial, public safety and law enforcement applications.

The antenna has a state-of-the-art radiating element that provides maximum reliability and maximum performance.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.



### **Features**

- Ground independent
- Single Input
- Built to MIL-STD-810

### **Electrical Specifications**

Frequency	700-800MHz
Polarization	Vertical
Impedance	50Ω
VSWR	2.0:1 Typical
Gain	4dBi ± .5
Pattern	Omni Directional Azimuth 360° Elevation 46°
Power	25 Watts
Connector	Type N Male

### **Mechanical Specifications**

Design	Dipole
Height	27½in. (.69m)
Radome	1.5 in. x .7 in. oval
Weight	.7 lbs. (.32 kg.)
Color	White/Black/Green/Tan/Grey

**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

**Made in the USA  
ISO 9001 Certified  
Form F042, Rev: A**

**www.hascall-denke.com  
12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**

**1Y44250**





**MPDP806-960/1710-1900-4**

**806-960 & 1710-1900 MHz**

**Manpack Antenna**

The MPDP806-960/1710-1900-4 antenna was designed for today's latest Land Mobile Radio (LMR) and Long Term Evolution (4G/LTE) communications platforms for military, commercial, public safety and law enforcement applications.

The antenna has a state-of-the-art radiating element that provides maximum reliability and maximum performance.

#### Features

- Ground Independent
- Single Input
- Built to meet MIL-STD-810
- High Gain

#### Electrical Specifications

Frequency	806-960 MHz & 1710-1990 MHz
Polarization	Vertical
Impedance	50 $\Omega$ Nominal
VSWR	3:1 Max 2.5:1 Typical Operational
Gain	4 dBi +/- .5
Radiation Pattern	Azimuth 360° Elevation 25° - 37°
Power	25 Watts
Connector	Type N Male

#### Mechanical Specifications

Design	Dipole
Height	28 in. (0.71 m)
Weight	1.5 lb. (0.68 kg)
Color	Black/Green/Tan/Grey



**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

**Made in the USA**

**[www.hascall-denke.com](http://www.hascall-denke.com)**

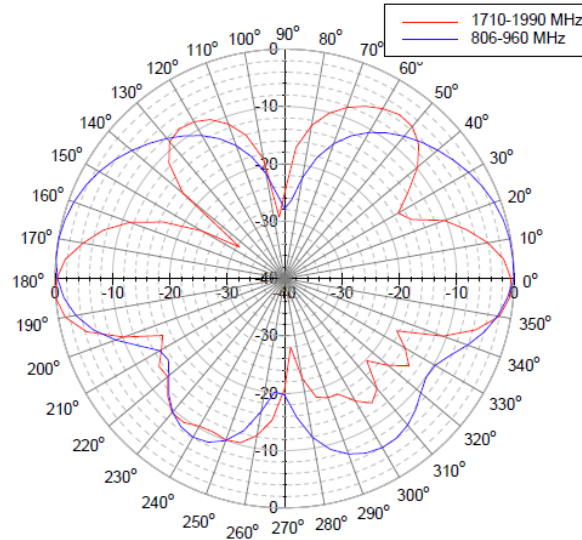
**1Y28100**

**ISO 9001 Certified  
Form F042, Rev: A**

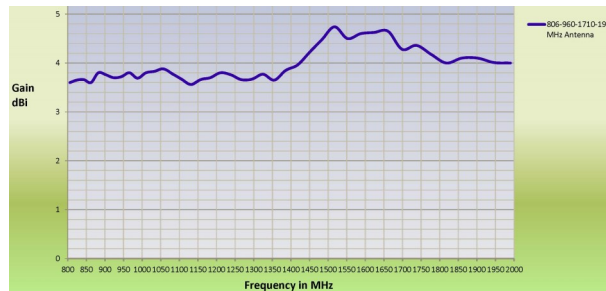
**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**



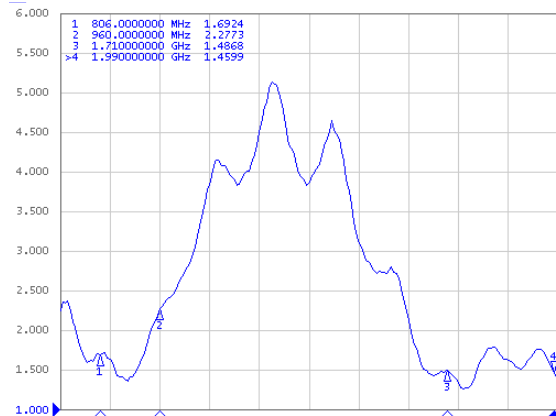
#### Pattern



#### Gain



#### VSWR



The MPDP1.25-1.45-4 antenna is designed to be used with radio systems operating in the 1250-1450MHz band. The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- IP 68
- VSWR <2:1
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

### Electrical Specifications

Frequency	1250-1450MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi +.5
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts
Connector	TNC-M

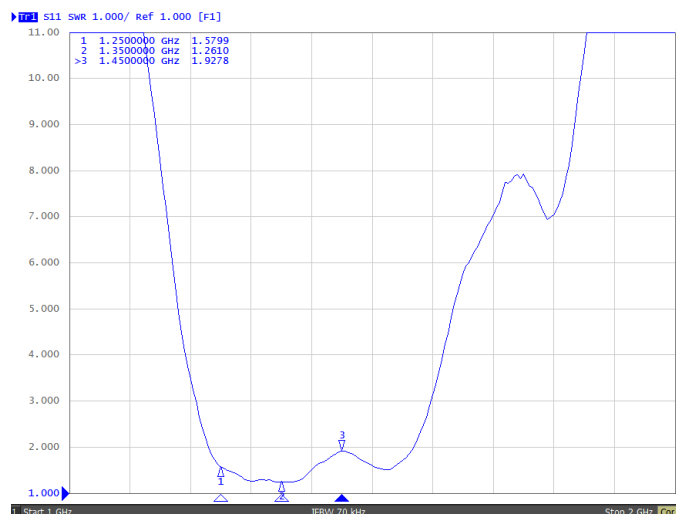
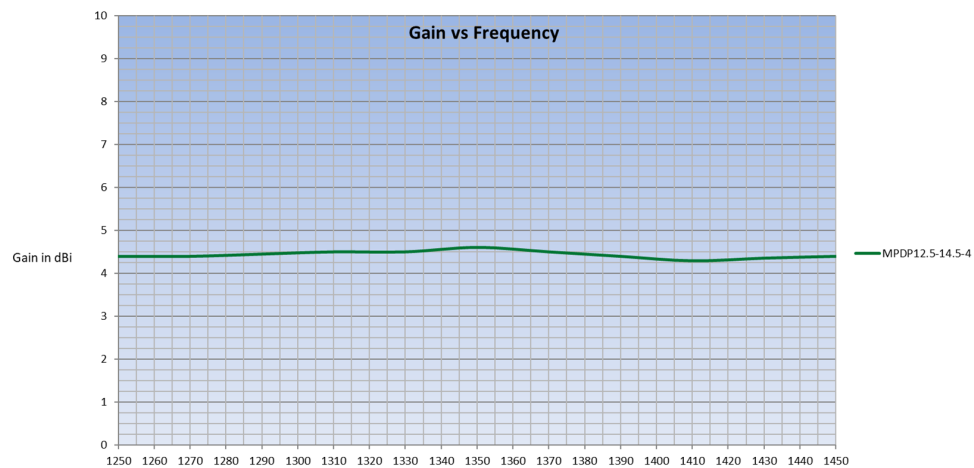
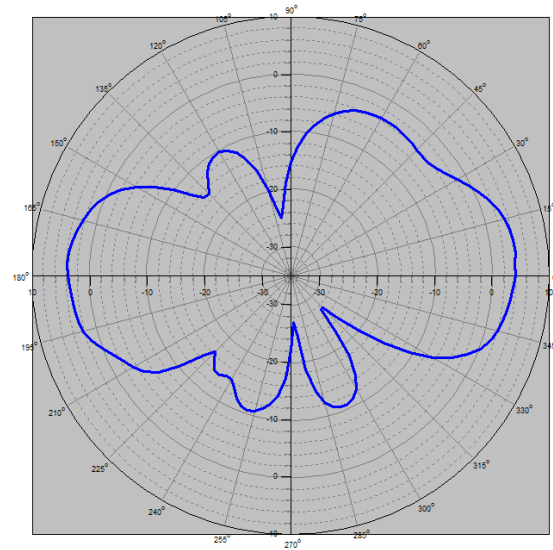
### Mechanical Specifications

Design	Dipole
Height	15.9 in. (.4 m)
Radome	1.12in. X.5 in. Oval
Weight	4.5oz. (128 g)
Color	Black/Green/Tan/Grey

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.





The MPDP1.75-1.85-4 antenna is designed to be used with radio systems operating in the 1750-1850MHz band. The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- IP 68
- VSWR <2:1
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

### Electrical Specifications

Frequency	1750-1850MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi +.5
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts
Connector	TNC-M

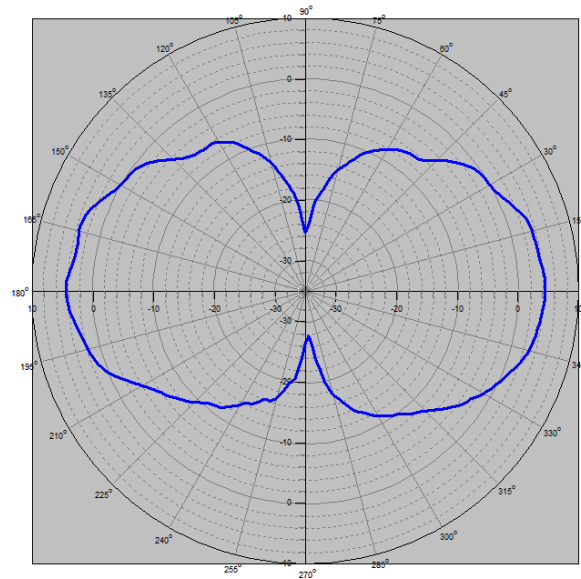
### Mechanical Specifications

Design	Dipole
Height	13-1/8 in. (.33m)
Radome	1.12in. X.5 in. Oval
Weight	4oz. (112 g)
Color	Black/Green/Tan/Grey

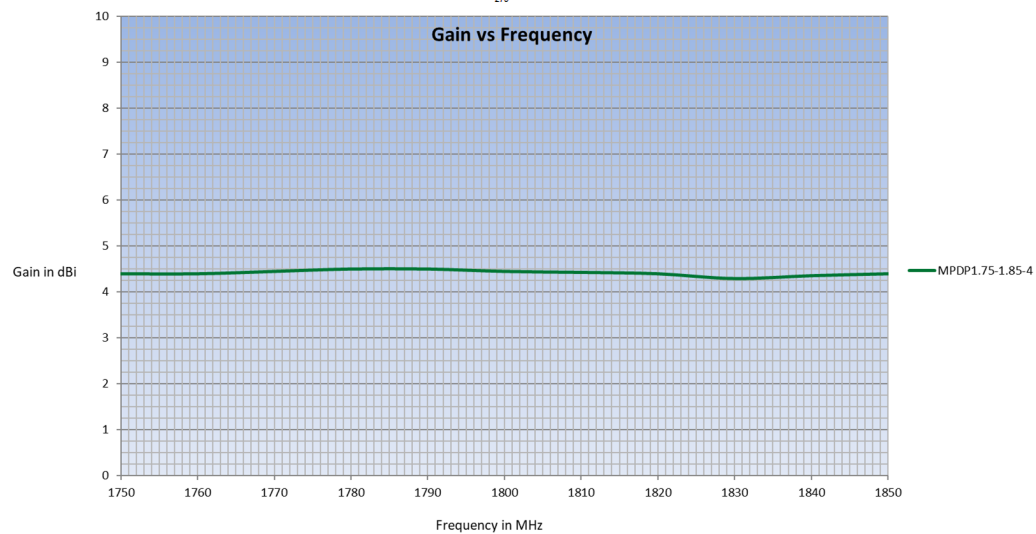
**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

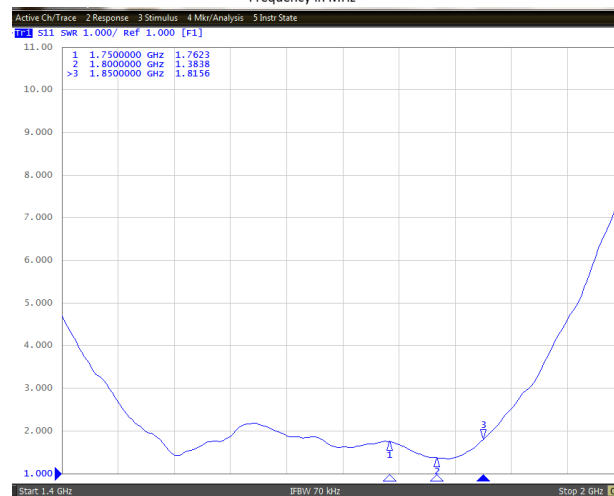
### Pattern Reference



### Gain



### VSWR





# MPDP1755-1815/2200-2270-4

## 1755-1815 & 2200-2270MHz

### Handheld L/S Dual Band Antenna

The MPDP1755-1815/2200-2270-4 antenna is designed to be used with Mobile Ad-Hoc Networking (MANET) radio systems. This antenna has been optimized for the Trellisware® TSM™ Waveform and other radios that operate in the 1755-1815 & 2200-2270MHz bands.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

#### Features

- IP 68
- VSWR <2:1
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

#### Electrical Specifications

Frequency	1755-1815 / 2200-2270MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	25 Watts PEP
Connector	SMA

#### Mechanical Specifications

Design	Dipole
Height	11.1in. (.282m)
Radome	1.12in. X.5 in. Oval
Weight	2.4oz. (.68kg)
Color	Black/Green/Tan/Grey

\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.



Made in the USA

ISO 9001 Certified  
Form F042, Rev: A

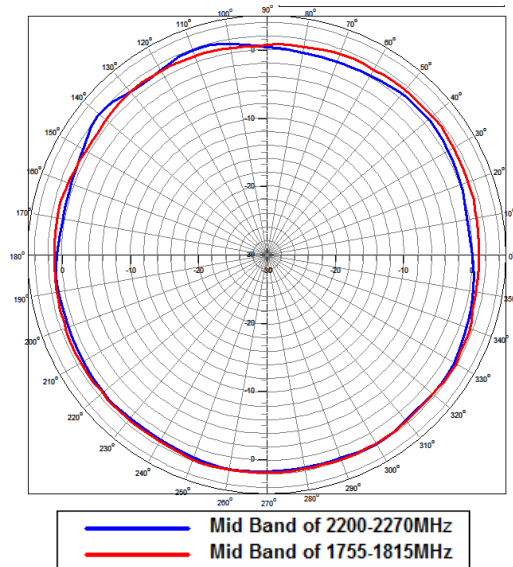
[www.hascall-denke.com](http://www.hascall-denke.com)

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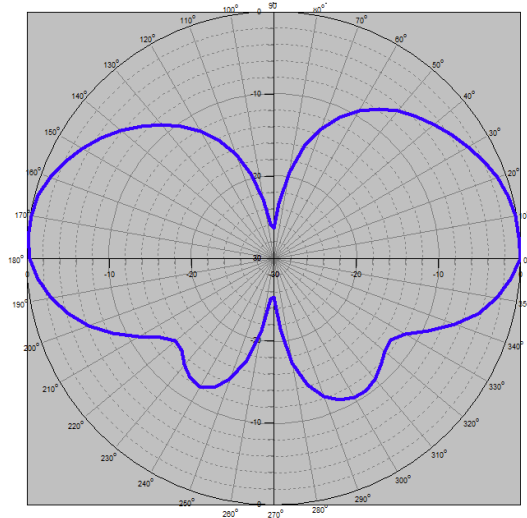
1Y34800



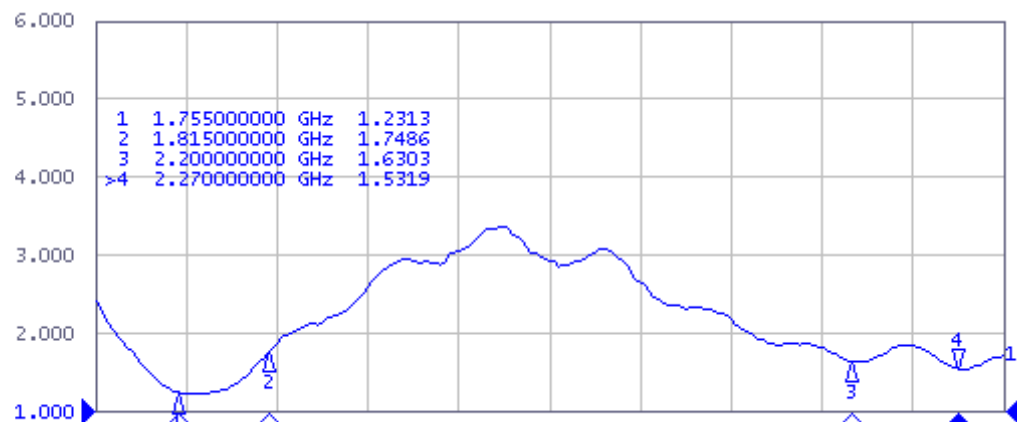
**H- Plane**



**E-Plane**



**VSWR**





# MPDP1755-1815/2200-2270-4AB

## 1755-1815 & 2200-2270MHz

### Handheld L/S Dual Band Antenna

The MPDP1755-1815/2200-2270-4AB antenna is designed to be used with Mobile Ad-Hoc Networking (MANET) radio systems. This antenna has been optimized for the Trellisware® TSM™ Waveform and other radios that operate in the 1755-1815 & 2200-2270MHz bands.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

#### Features

- IP 68
- VSWR <2:1
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

#### Electrical Specifications

Frequency	1755-1815 / 2200-2270MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	25 Watts PEP
Connector	TNC-M

#### Mechanical Specifications

Design	Dipole
Height	12 in. (.3 m)
Radome	1.12in. X.5 in. Oval
Weight	3.7 oz. (105 g)
Color	Black/Green/Tan/Grey



\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.

\*\*Specifications are subject to change without prior notice.

Made in the USA

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1Y35100

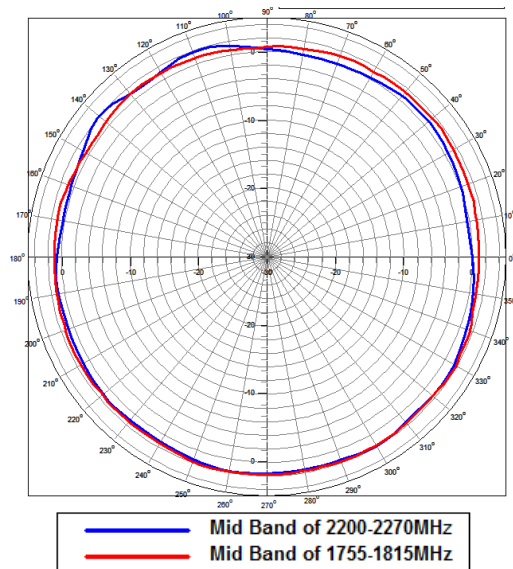
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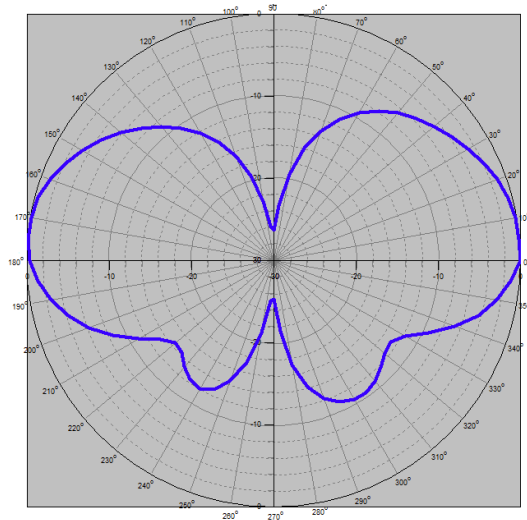




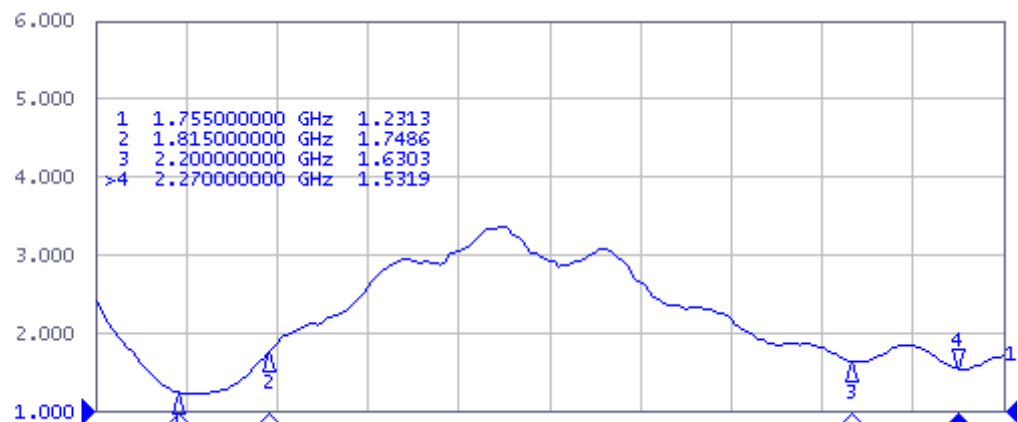
**H- Plane**



**E-Plane**



**VSWR**



The MPDP2.2-2.35-4 antenna is designed to be used with radio systems operating in the 2200-2350MHz band. The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- IP 68
- VSWR <2:1
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

### Electrical Specifications

Frequency	2200-2350MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi +.5
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts
Connector	TNC-M

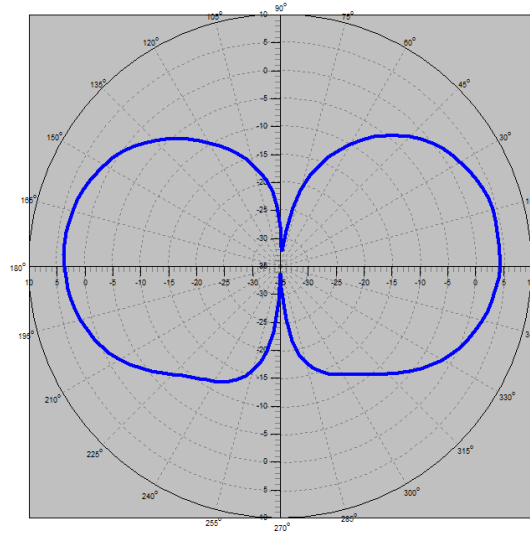
### Mechanical Specifications

Design	Dipole
Height	12 in. (.3 m)
Radome	1.12in. X.5 in. Oval
Weight	3.7 oz. (105 g)
Color	Black/Green/Tan/Grey

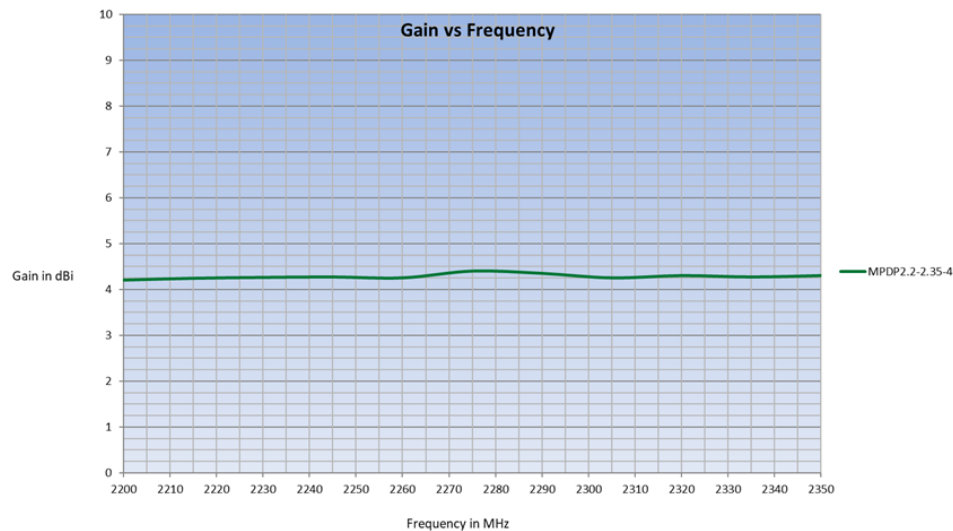
**\*\*All information on this product and the product itself is the property of and is proprietary to Hascall-Denke.**

**\*\*Specifications are subject to change without prior notice.**

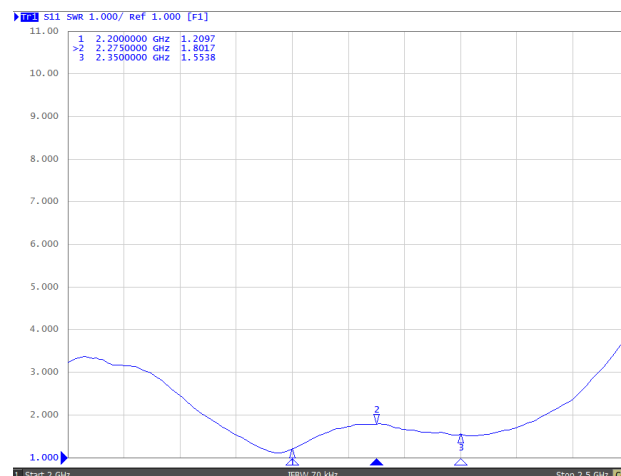
## Pattern Reference



## Gain



## VSWR





# MPDP2.2-2.5/4.4-5.875

## 2200-2500 & 4400-5875MHz

### S/C Dual Band Antenna

The MPDP2.2-2.5/4.4-5.875 Dual Band antenna is designed to be used with various radio and communication systems operating in the 2200-2500 & 4400-5.875MHz bands. This antenna allows flexibility for MIMO, Wi-Fi and LTE-U applications.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



#### Features

- IP 68
- Dual Band
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to other platforms

#### Electrical Specifications

Frequency	2200-2500 & 4400-5875MHz
Polarization	Vertical
Impedance	50Ω
VSWR	2:1 Typical, 2.5:1 max
Gain	4dBi @2200-2500MHz
Gain	6dBi @4400-5.875MHz
Pattern	Omni Directional Azimuth 360° Elevation 42°
Power	25 Watts PEP
Connector	TNC-M

#### Mechanical Specifications

Design	Dipole
Height	16.6in. (.42m)
Radome	1.12in. X.5 in. Oval
Weight	5.06oz. (.14kg)
Color	Black/Green/Tan/Grey

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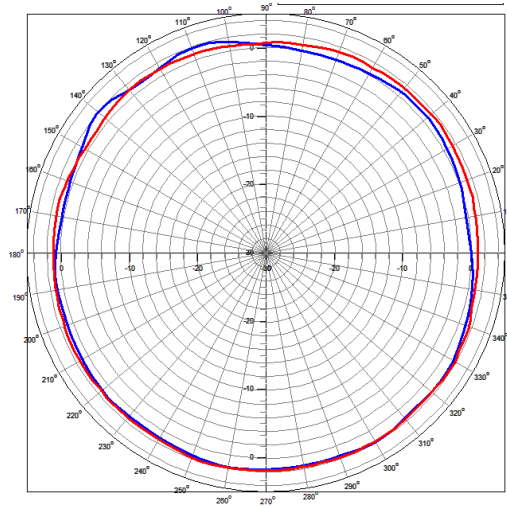
1Y40350

ISO 9001 Certified  
Form F042, Rev: A

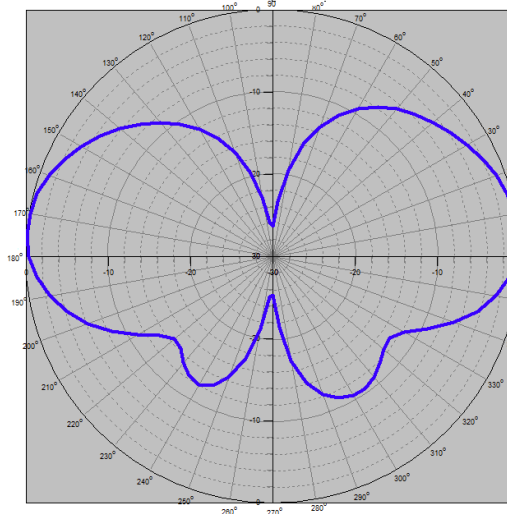
12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139



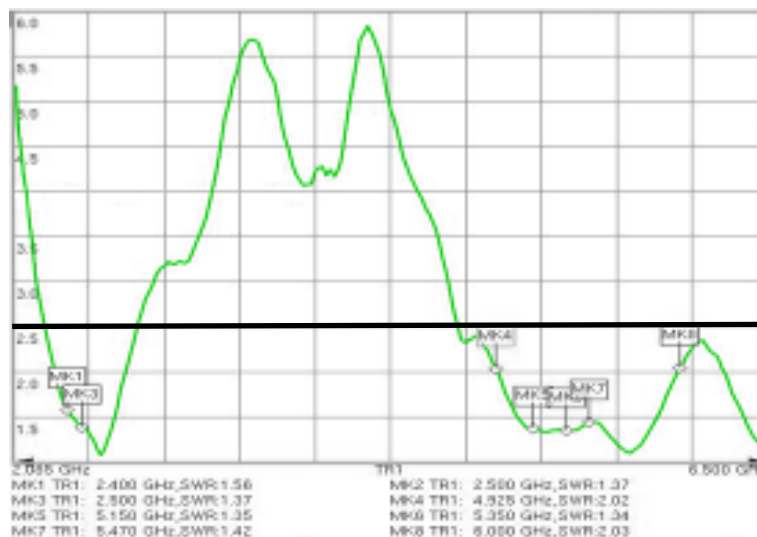
**H- Plane**



**E-Plane**



**VSWR**



The MPDP2.3-2.5/5.0-6.0 Dual Band WiFi antenna with RP SMA connector is designed to be used with WiFi, M2M, IoT's and 4.9GHz Public Safety Spectrum wireless devices.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant materials for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



#### Features

- 802.11ac
- ISM, U-NII 1-3
- 4.9GHz Public Safety Spectrum
- 360° Rotating Gooseneck

#### Electrical Specifications

Frequency	2300-2500 & 5000-6000 MHz
Polarization	Vertical
Impedance	50 $\Omega$ Nominal
VSWR	< 2.0:1 Typical
Gain	2.0 dBi @ 2400-2500 MHz 4.0 dBi @ 5000-6000 MHz
Radiation Pattern	Azimuth 360° Elevation 42°
Power	25 Watts PEP
Connector	Type RP SMA

#### Mechanical Specifications

Design	Dipole
Height	12.5in. (317.5mm)
Radome	1.2 in. Oval (30 mm)
Weight	3.12oz.
Connector	RP SMA
Color	Black/Green/Tan/White

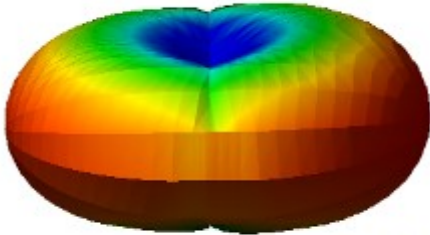
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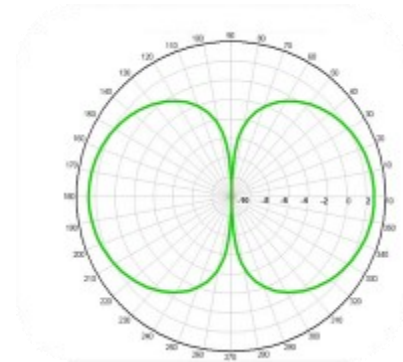


## Pattern

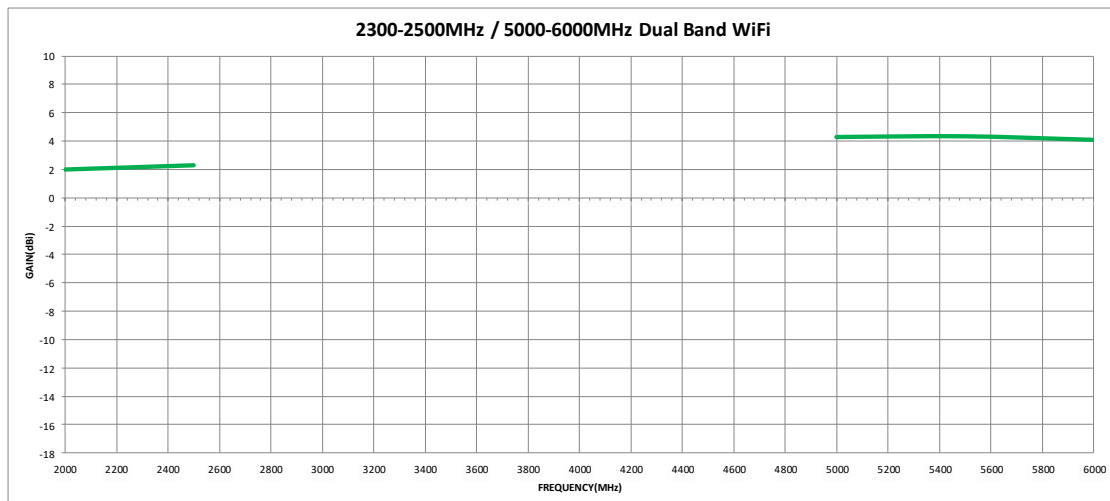
3D REFERENCE



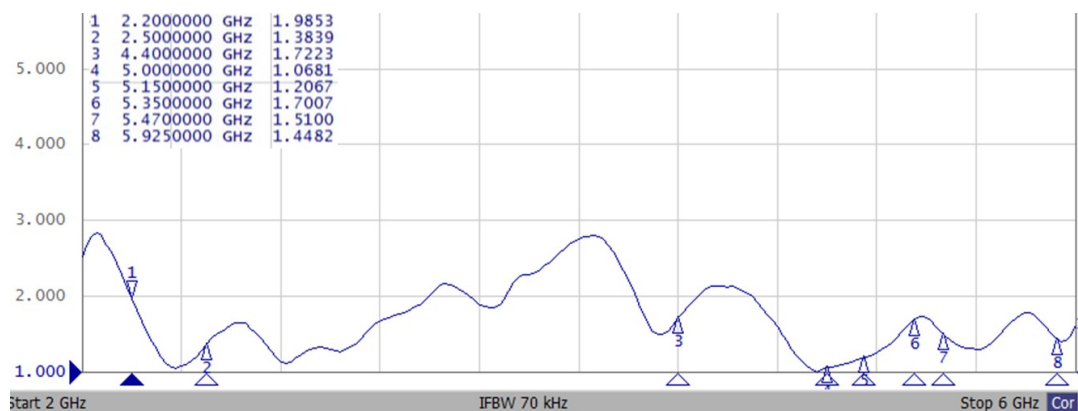
ELEVATION PATTERN REFERENCE



## Gain



## VSWR



The MPDP4.4-6.0-7 antenna is designed to be used with various radio and wireless communication systems operating in the 4400-6000MHz bands.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



### Features

- Broadband coverage
- 360° Rotating Gooseneck
- Consistent Gain across the band
- Adaptable to many platforms

### Electrical Specifications

Frequency	4400-6000MHz
Polarization	Vertical
Impedance	50Ω
VSWR	2:1 Typical
Gain	7dBi ±.5
Pattern	Omni Directional Azimuth 360° Elevation 22°
Power	20 Watts PEP
Connector	TNC-M

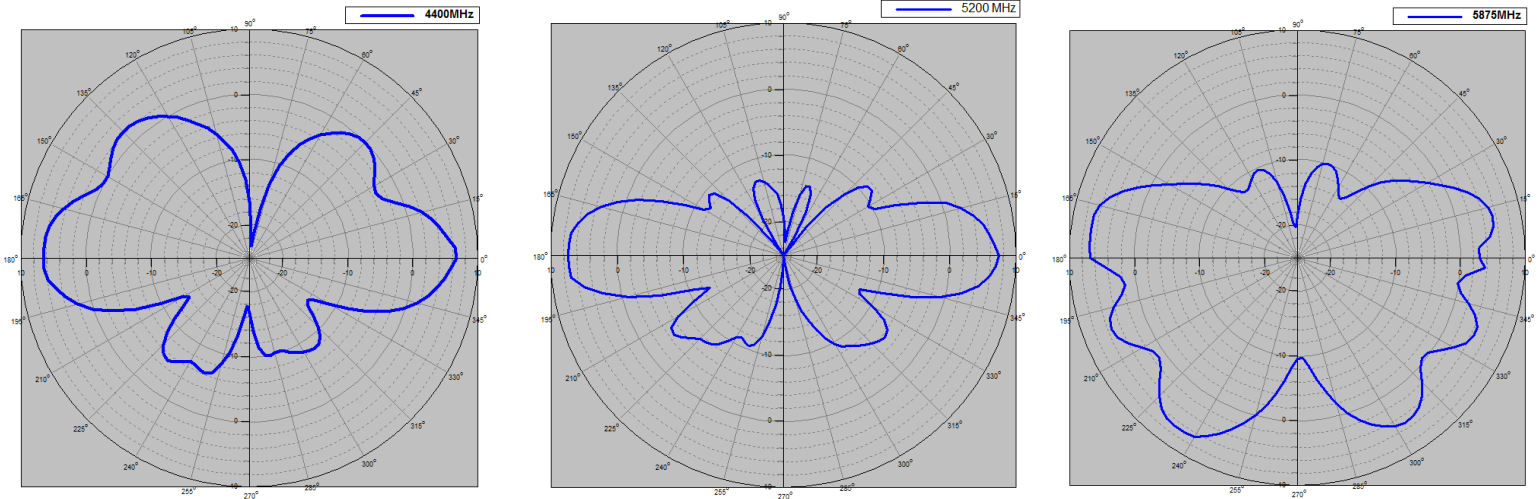
### Mechanical Specifications

Design	Dipole
Height	12-1/4 in. (.31 m)
Radome	.625in. dia. (16mm)
Weight	3.3oz. (94 g)
Color	Black/Green/Tan/Grey

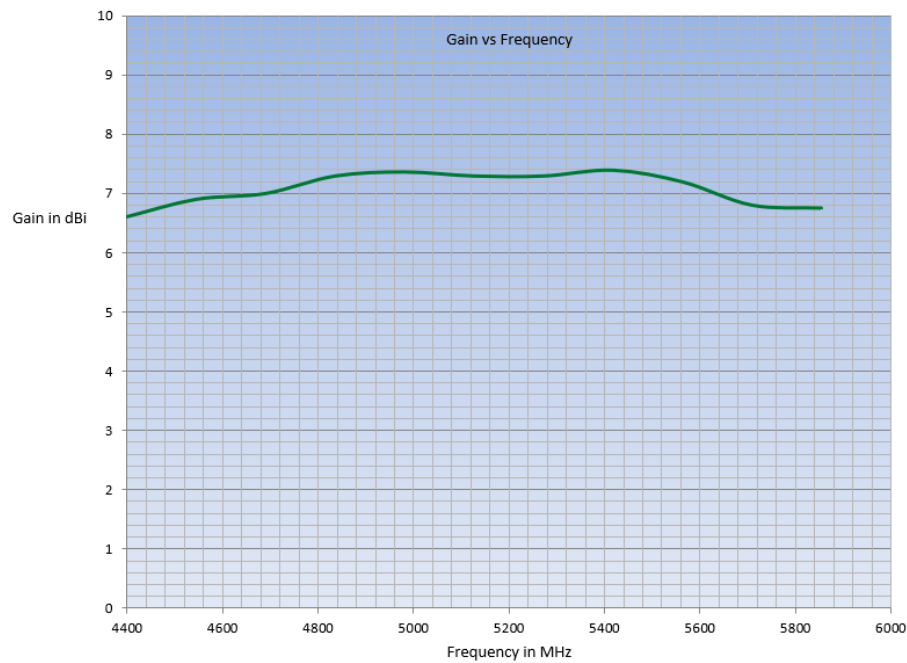
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**\*\*Specifications are subject to change without prior notice.**

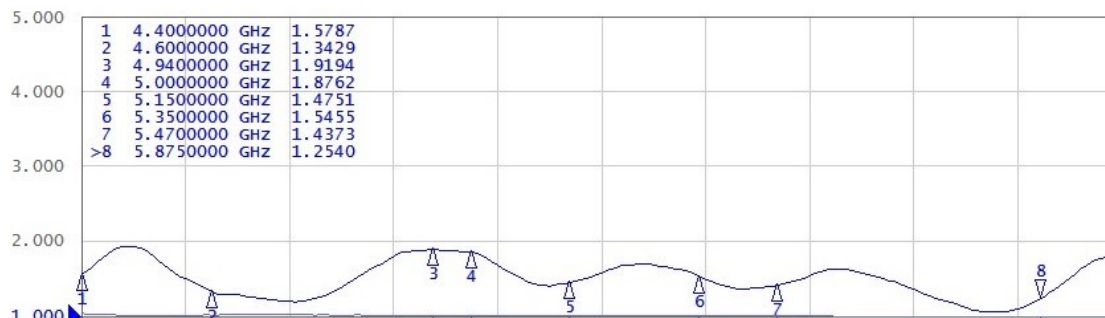
## Patterns



## Gain



## VSWR



# Vehicular



**HD**  
HASCALL-DENKE





The MVDP150/450/816 is a full spectrum multiband VHF, UHF-H, 700/800/900MHz antenna designed for today's latest Land Mobile Radios (LMR) for maritime, military, commercial, public safety and law enforcement applications

The radiator elements are designed for maximum durability and performance. The antenna radiator is sealed in heavy duty fiberglass for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	136-174MHz 380-520MHz 762-960MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2.5:1 operational <3.0:1 Max
Gain	Unity to +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	100 Watts
Connector	12" pigtail w/Type N Female

### Mechanical Specifications

Design	Dipole
Height	41.25in. (1.05m)
Diameter	2¼" (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread—Extension sold separate
Color	White/Black/Green/Tan/Grey

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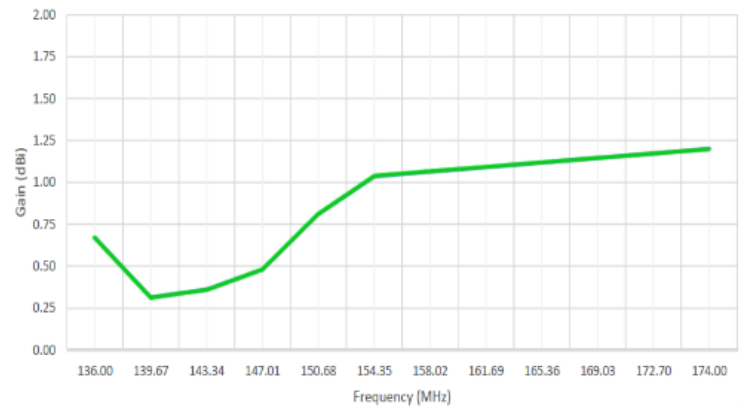
**\*\*Specifications are subject to change without prior notice.**





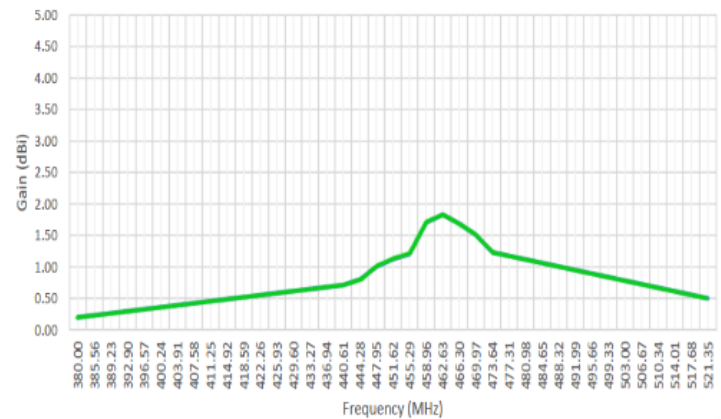
## Gain Pattern

136-174MHz



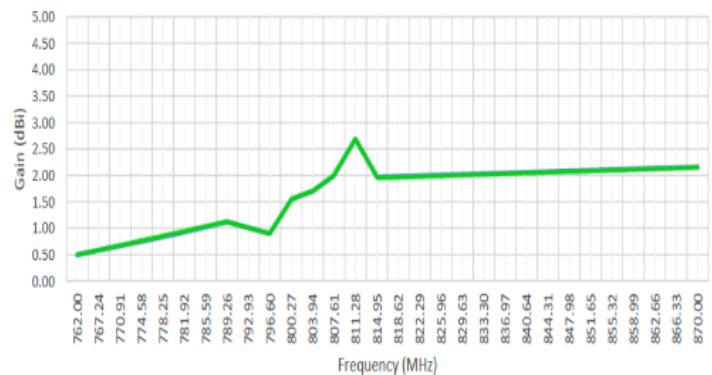
## Gain Pattern

380-520MHz

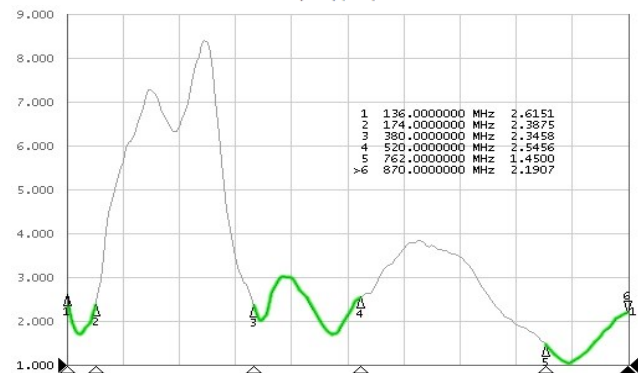


## Gain Pattern

762-870MHz



## VSWR



The MVMP149-175 is a state of the art, low profile wide band VHF antenna that operates with all radios within the 149-175 MHz Band. The low profile design allows the antenna to be used in vehicles that encounter clearance issues or for vehicles in which the functionality of a low profile design is preferred.

This antenna features the ability to capacitively couple to the ground plane, allowing it to function without metal to metal contact.

### Features

- Low Profile
- Robust Construction
- Unity Gain
- NMO mounting

### Electrical Specifications

Frequency	149-175 MHz
Polarization	Vertical
Impedance	50 $\Omega$ Nominal
VSWR	< 2.0:1 Max
Gain	Unity (Typ)
Radiation Pattern @ Mid Band	Azimuth 360° Elevation 80°
Power	100 Watts (Peak)
Connector	Type NMO

### Mechanical Specifications

Design	Monopole
Height	6" (152 mm)
Radome	4.5" Dia (114 mm)
Weight	1 lb (.45 kg)
Mount	NMO
Wind Survival	150 MPH
Color	Painted to customer Spec



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**1Y20350**

**ISO 9001 Certified**  
**Form F042, Rev: A**

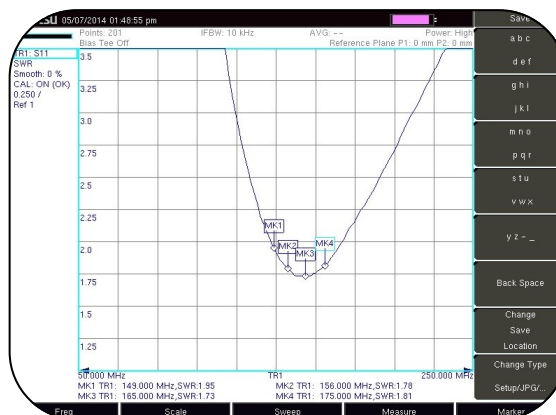
**12285 U.S. Highway 41 N., Palmetto, FL 34221**  
**1-800-473-2139**



## Pattern

## Gain

## VSWR



The MVDP225X2AC antenna is designed to be used in military, commercial, and other applications where reliability is needed most. This antenna works with all radios within the 225-450 MHz band. Being “ground independent”, this antenna can be used on all types of vehicles (metal or non-metal) with no degradation in performance.

Robust and tough, this antenna is housed in a thick fiberglass radome and is constructed from corrosion resistant materials for reliability in the harshest environ-

#### Features

- Ground Plane Independent
- Built to Meet MIL-STD 810



#### Electrical Specifications

Frequency	225-450 MHz
Polarization	Vertical
Impedance	50 $\Omega$ Nominal
VSWR	2:1 Typical 3:1 Max
Gain	1 - 2 dBi
Radiation Pattern @ Mid Band	Azimuth 360° Elevation 90°
Power	20 Watts
Connector	Type N Female

#### Mechanical Specifications

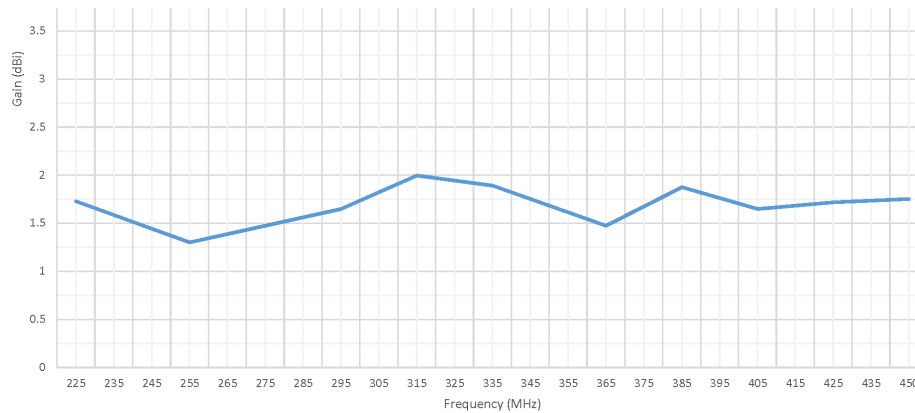
Design	Dipole
Height	32 in. (0.81 m)
Radome	1 in. Dia (26 mm)
Weight	4.9 lb. (2.2 kg)
Mount	NATO Standard Four .5" (12.7 mm) Holes, equally spaced on a 4.5" (114.3 mm) Dia. BHC
Color	Black/Green/Tan/Grey

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and is proprietary to Hascall-Denke.

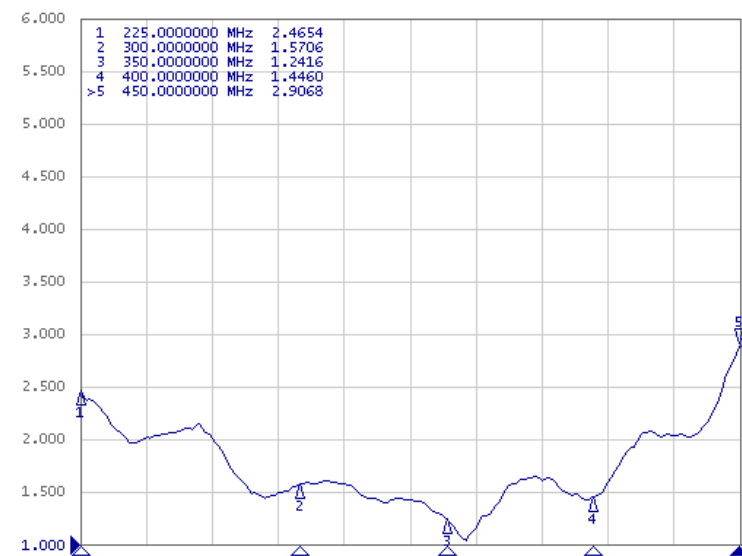
\*\*Specifications are subject to change without prior notice.

## Pattern

## Gain



## VSWR





**MVDP400-444-4-D**

**400-444MHz**

**Full Duplex SF-STAR Antenna**

The MVDP400-444-4-D antenna was designed for full-duplex communications allowing same frequency simultaneous transmission and reception (SF-STAR).

The antenna has state-of-the-art radiating elements with -35 to -40dB port-to-port isolation and 4dBi of gain for maximum efficiency. Built robust and tough, this antenna is housed in a fiberglass radome and is constructed from corrosion resistant materials for reliability in the harshest environments and designed to meet the rigors of MIL-STD-810.



### Features

- -35 to -40dB Port-to-Port Isolation
- Full Duplex
- Spatial Diversity
- MIMO

### Electrical Specifications

Frequency	400-444MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2:1 Typical, 2.5:1 max
Gain	4dBi
Radiation Pattern	Azimuth 360° Elevation 45°
Isolation	-35 to -40dB Avg.
Power	50 Watts
Connector	(2) Type N Female

### Mechanical Specifications

Design	Dipole
Height	~83 in. (2.21m)
Radome	Fiberglass
Weight	8 lbs (3.63kg)
Mount	NATO 4 Bolt
Color	Black/Green/Tan/Grey/White

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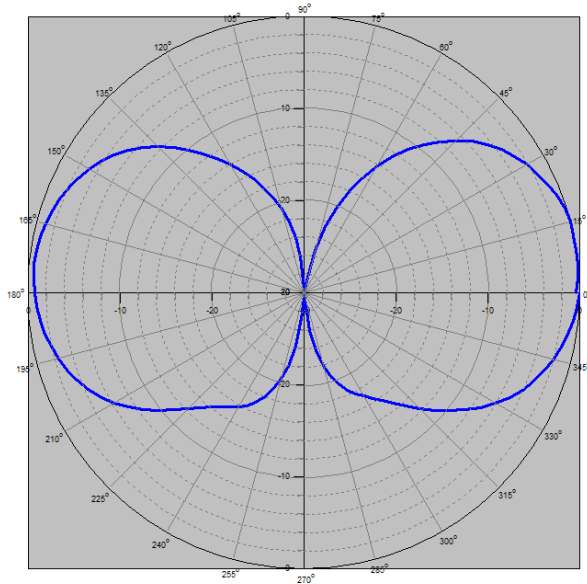
**1Y44000**

**ISO 9001 Certified  
Form F042, Rev: A**

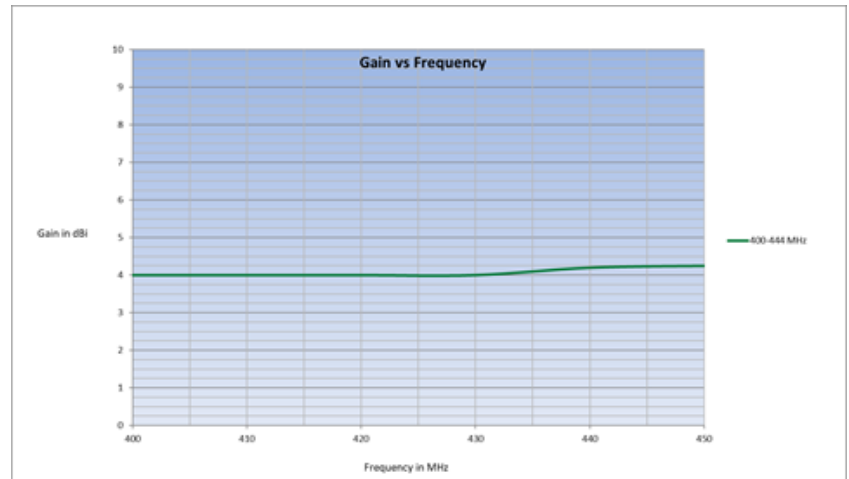
**12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139**



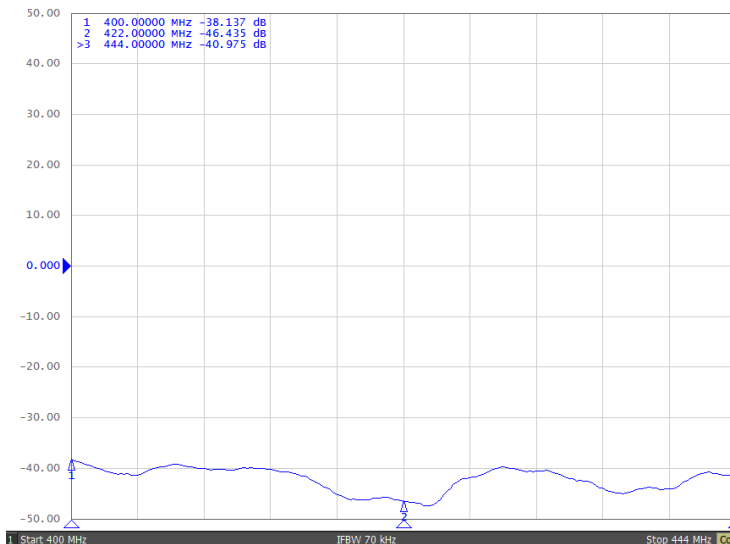
## Pattern



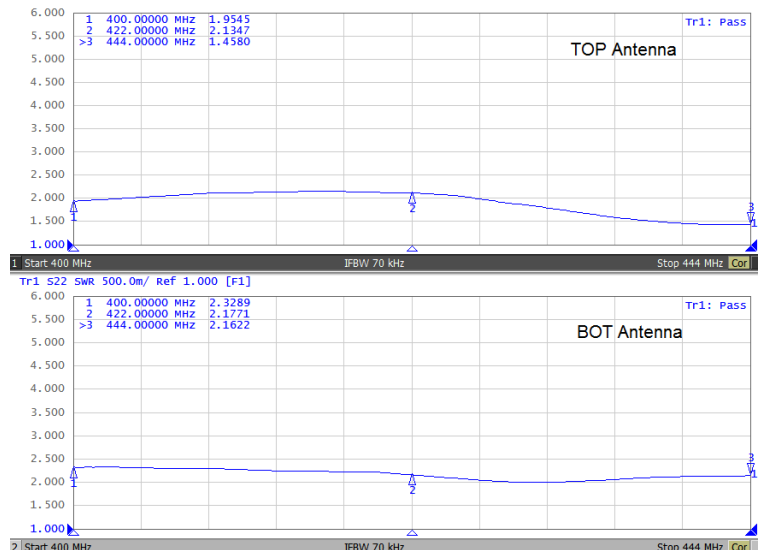
## Gain



## Isolation



## VSWR





The MVDP698X4 antenna was designed for Fourth Generation (4G) Long Term Evolution (LTE) and Mobile Ad-Hoc Networking (MANET) communications platforms for tactical and commercial vehicles.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

### Features

- Ground plane independent
- 4G/LTE communications
- MANET communications
- Low Vertical Signature

### Electrical Specifications

Frequency	698-2600MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	+3 ~ +5dBi ±.5
Pattern	Omni Directional Azimuth 360° Elevation 37 ~ 58°
Power	50 Watts
Connector	Type N Female

### Mechanical Specifications

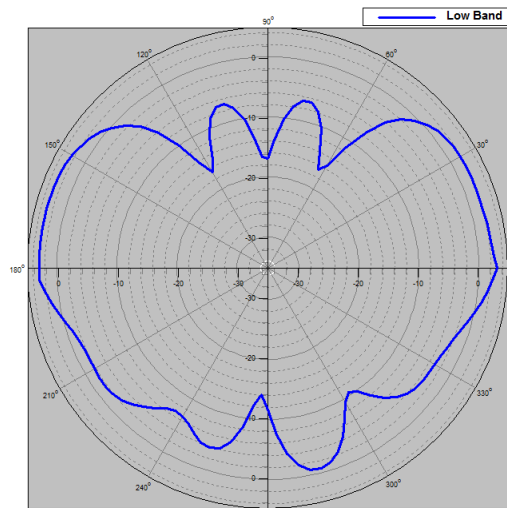
Design	Dipole
Height	28.5 in. (724mm)
Diameter	1.5in. ~ 1.75in. (38.1 ~ 44.5mm)
Radome	Fiberglass
Weight	5lbs. (2.27kg.)
Mounting	NATO 4 Hole
Color	Black/Green/Tan/Grey



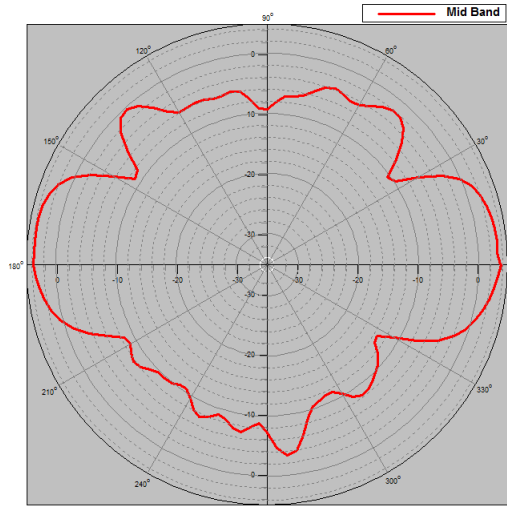
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**\*\*Specifications are subject to change without prior notice.**

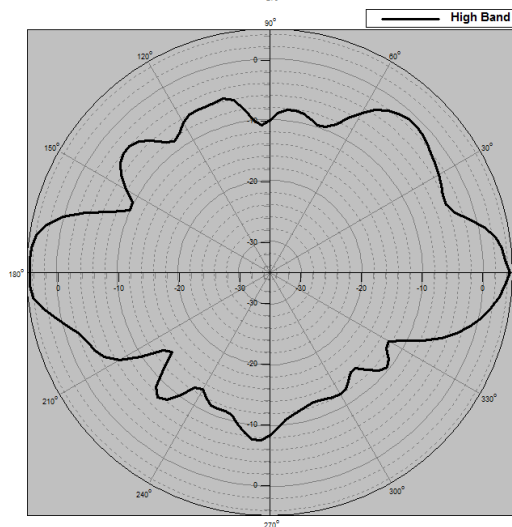
**Pattern**  
**Reference**  
**698MHz**



**Pattern**  
**Reference**  
**1375MHz**



**Pattern**  
**Reference**  
**2600MHz**



The MVDP700-2700 antenna was designed for Fourth Generation (4G) Long Term Evolution (LTE) communications. This antenna has an High Strength Magnetic Base perfect for on-the-move applications.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.

### Features

- Ground plane independent
- 4G/LTE Ready
- High Strength Magnetic Base
- Low Vertical Signature

### Electrical Specifications

Frequency	700-2700MHz
Polarization	Vertical
Impedance	50Ω
VSWR	3.0:1 Max
Gain	+3 ~ +5dBi ±.5
Pattern	Omni Directional Azimuth 360° Elevation 37 ~ 58°
Power	50 Watts
Connector	User Defined (cable optional)

### Mechanical Specifications

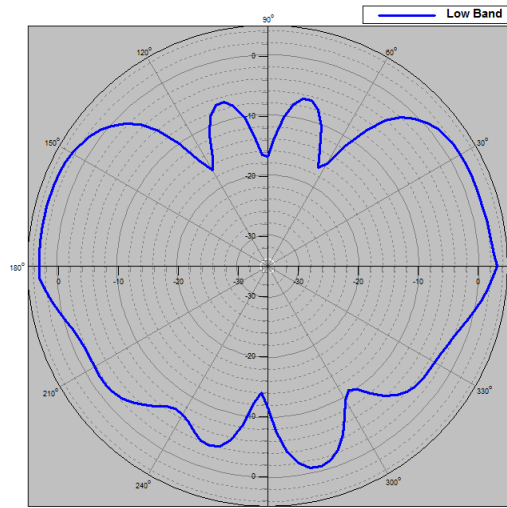
Design	Dipole
Height	~18.25 in. (472mm)
Diameter	1.5in. ~ 1.75in. (38.1 ~ 44.5mm)
Radome	Fiberglass
Weight	3.1lbs. (1.41kg)
Mounting	5" dia. magnetic base
Color	Black/Green/Tan/Grey



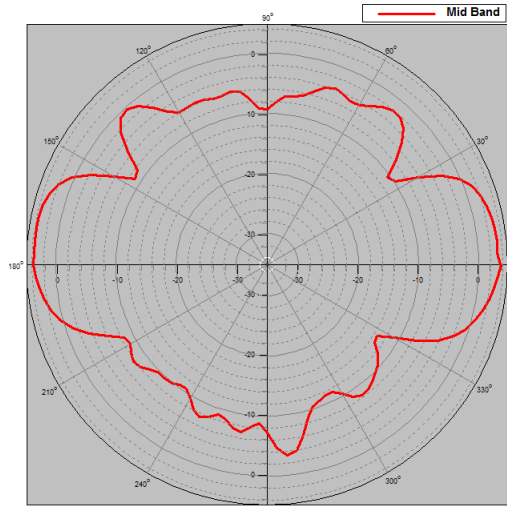
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\*\*Specifications are subject to change without prior notice.

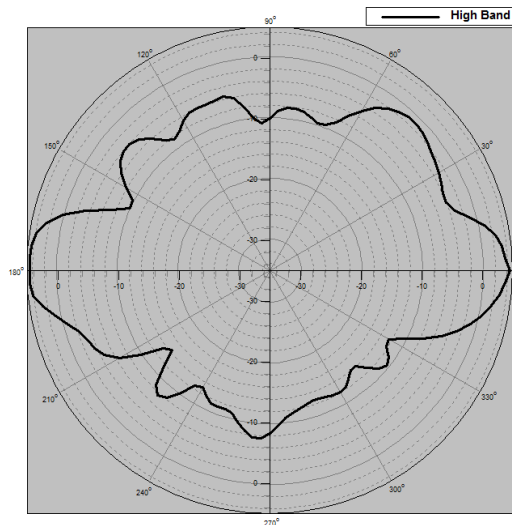
**Pattern**  
**Reference**  
**700MHz**



**Pattern**  
**Reference**  
**1375MHz**



**Pattern**  
**Reference**  
**2700MHz**





# MVDP1755-1815/2200-2270-4

## 1755-1815 & 2200-2270MHz

### Vehicular L/S Dual Band Antenna

The MVDP1755-1815/2200-2270-4 antenna is designed to be used with Mobile Ad-Hoc Networking (MANET) vehicular radio systems. This antenna has been optimized for the Trellisware® TSM™ Waveform and other radios that operate in the 1755-1815 & 2200-2270MHz bands.

The antenna is designed with a state of the art radiating element for maximum efficiency. Built robust and tough, this antenna is housed in a thick UV stable radome and is constructed from corrosion resistant material for reliability in the harshest environments and also designed to meet the rigors of MIL-STD-810.



#### Features

- Low VSWR
- Consistent Gain across the band
- Optimized for TSM™ Waveform
- Superior Electrical Performance
- Low Vertical Signature

#### Electrical Specifications

Frequency	1755-1815 / 2200-2270MHz
Polarization	Vertical
Impedance	50Ω
VSWR	<2:1 Typical
Gain	4dBi
Pattern	Omni Directional Azimuth 360° Elevation 45°
Power	20 Watts
Connector	Type N Female

#### Mechanical Specifications

Design	Dipole
Height	24in. (610mm)
Radome	1.25in. OD (32mm)
Weight	4lbs. (1.8kg)
Color	Black/Green/Tan/Grey

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\*\*Specifications are subject to change without prior notice.

Made in the USA

ISO 9001 Certified  
Form F042, Rev: A

[www.hascall-denke.com](http://www.hascall-denke.com)

12285 U.S. Highway 41 N., Palmetto, FL 34221  
1-800-473-2139

1Y39550







**MVDP4.4-5.875-7-DAB**

**4400-5875 MHz**

## **Dual Polarization Omnidirectional Antenna**

The MVDP4.4-5.875-7-DAB is designed to work with all radios operating from 4.4-6.0 GHz. This Band 4 antenna is designed to maximize performance for HCLOS (High Capacity Line of Sight) and TRILOS (Terrestrial Transmission Line of Sight) Radios.

Robust and tough, this antenna is housed in a polycarbonate radome and is constructed from corrosion resistant materials for reliability in the harshest environments.

### Features

- Ideal for HCLOS & TRILOS radios
- Dual Polarization
- Ground Plane Independent
- NATO Flange with Spring

### Electrical Specifications

Frequency	4400-6000 MHz
Polarization	Dual (Horizontal & Vertical)
Impedance	50 $\Omega$ Nominal
VSWR	2:1 Maximum
Gain	< 6 dBi
Radiation Pattern @ Mid Band	Azimuth 360° Elevation 24°
Power	25 Watts
Connector	(2) Type N Female

### Mechanical Specifications

Design	Dipole
Height	20 in. (0.51 m)
Radome	2.75 in. Dia (70 mm)
Weight	5.7 lb. (2.59 kg)
Mount	NATO Standard Four .5" (12.7 mm) Holes, equally spaced on a
Color	Black/Green/Tan/Grey



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**Made in the USA**

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**1Y31750**

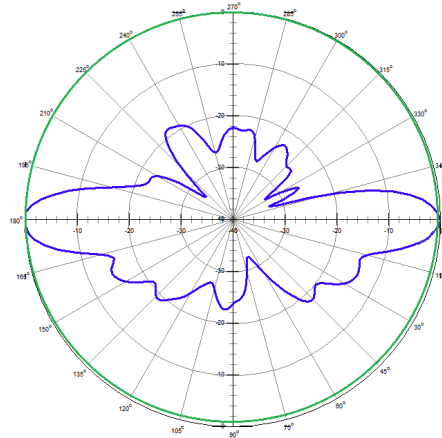
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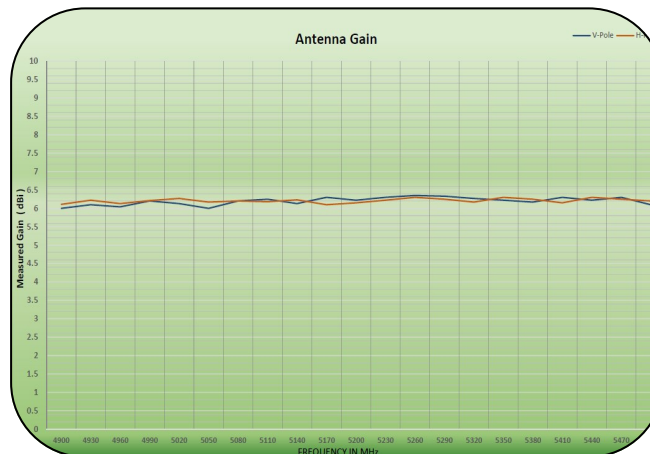




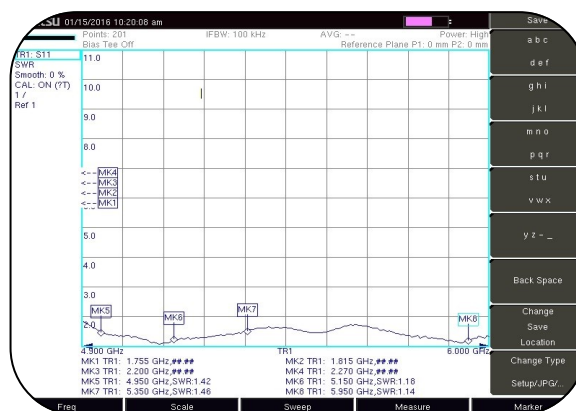
## Pattern



## Gain



## VSWR





# Marine



**HD**  
**HASCALL-DENKE**

NOTE D  
TRAFFIC SEPARATION SCHEME  
One-way traffic lanes overlaid on this chart are  
RECOMMENDED for use by all vessels traveling  
between the points involved. They have been designed  
to aid in the prevention of collisions at the approach to  
Nantuxet Bay and Buzzards Bay but are not intended  
in any way to supersede or alter the applicable Rules  
of the Road. Separation zones are intended to separate  
inbound and outbound traffic and to be free of ship traf-  
fic. Separation zones should not be used except for  
crossing purposes. When crossing traffic lanes and  
separation zones use extreme caution.

**ANCHORAGE AREAS**  
110.140, 110.450 (see note A)  
Limits and design of anchorage areas are shown  
GENERAL ANCHORAGES (E) (F) (L) (M)  
SPECIAL ANCHORAGE (2)

**CAUTION**  
Only marine radio beacon signals have been  
broadcast for this area. Lighthouses and other  
navigation aids can be found in the U.S. Coast  
Guard Light Lists and in the U.S. Coast  
Agency Publication 117.  
Radio direction-finding bearings to com-  
mercial broadcasting stations are subject to error  
and should be used with caution.  
Station positions are shown  
O (Accurate location) o (Approximate location)





The MADP117-138 antenna was designed for today's latest VHF-AM communications platforms for maritime, military, commercial, and law enforcement applications.

The radiator element is designed for maximum durability and performance. The antenna radiator is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	117-138MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2:1 Typical
Gain	≥ 2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

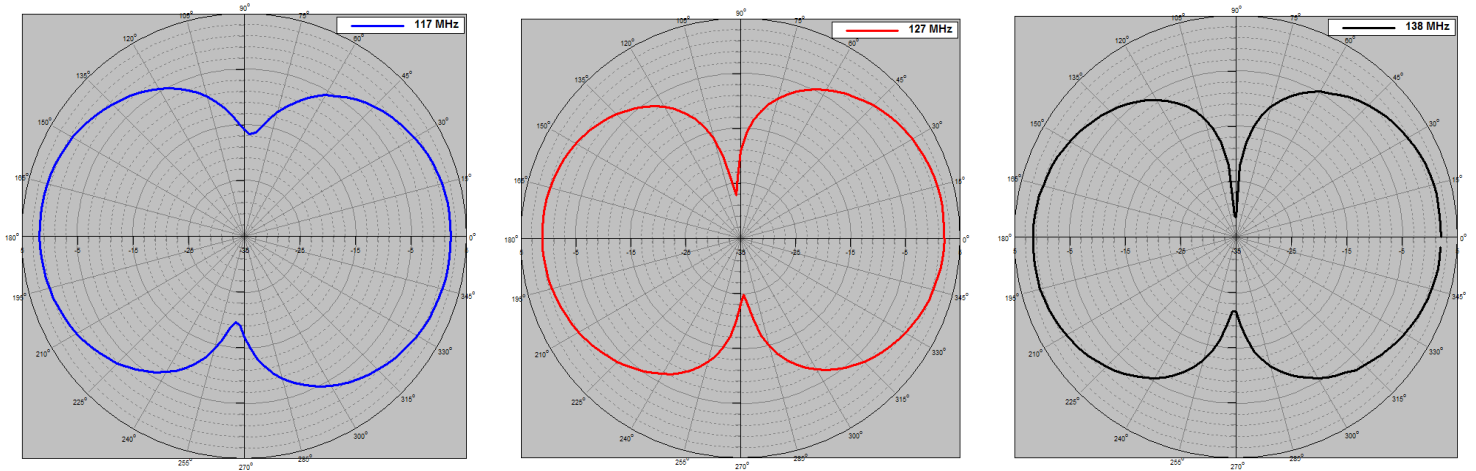
Design	Dipole
Height	50.5in. (1.3m) w/o extension
Diameter	2¼in. (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread Extension
Color	White/Black/Green/Tan/Grey



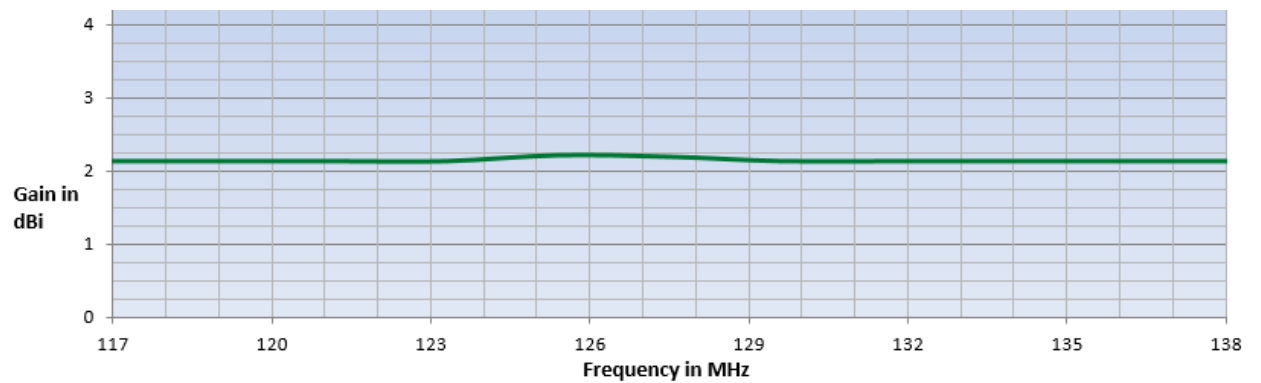
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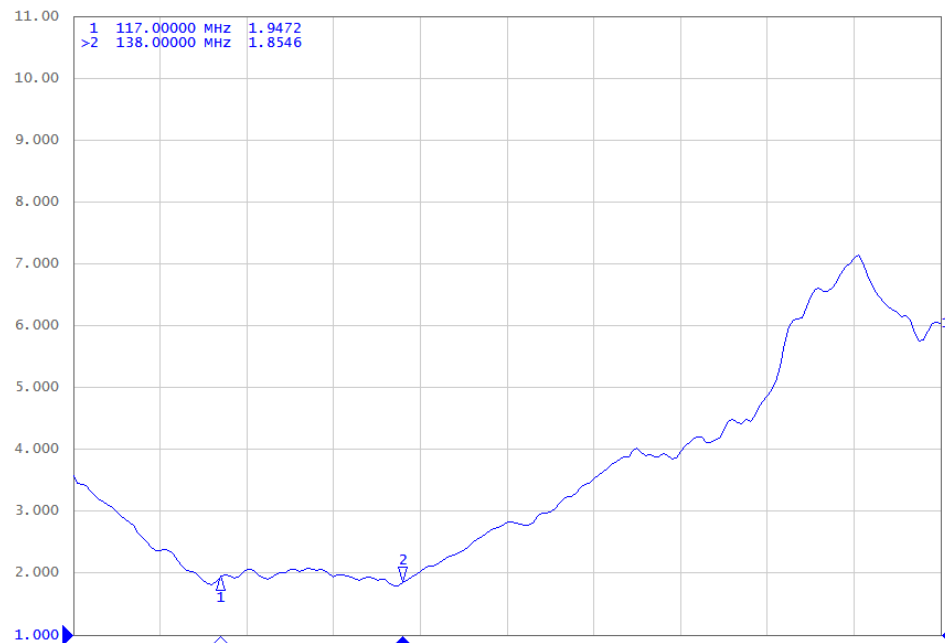
## Patterns



## Gain



## VSWR



The MADP150/450/818 is a full spectrum multiband VHF, UHF-H, 700/800/900MHz antenna designed for today's latest Land Mobile Radios (LMR) for maritime, military, commercial, public safety and law enforcement applications

The radiator elements are designed for maximum durability and performance. The antenna radiator is sealed in heavy duty fiberglass for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	136-174MHz 380-520MHz 762-960MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2.5:1 operational <3.0:1 Max
Gain	Unity to +2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	100 Watts
Connector	12" pigtail w/Type N Female

### Mechanical Specifications

Design	Dipole
Height	41.25in. (1.05m)
Diameter	2¼" (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (2.5kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread—Extension sold separate
Color	White/Black/Green/Tan/Grey

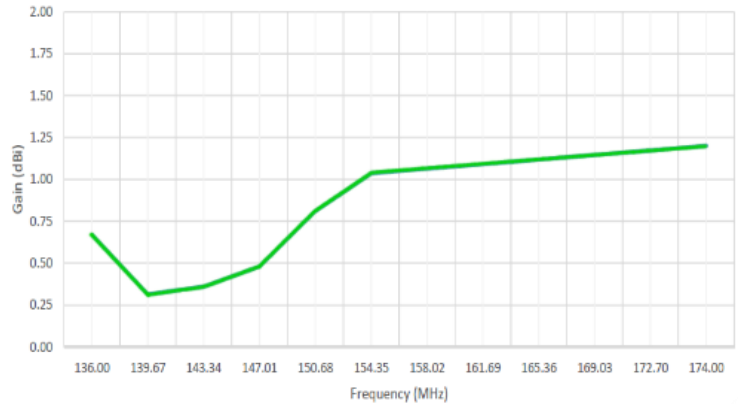


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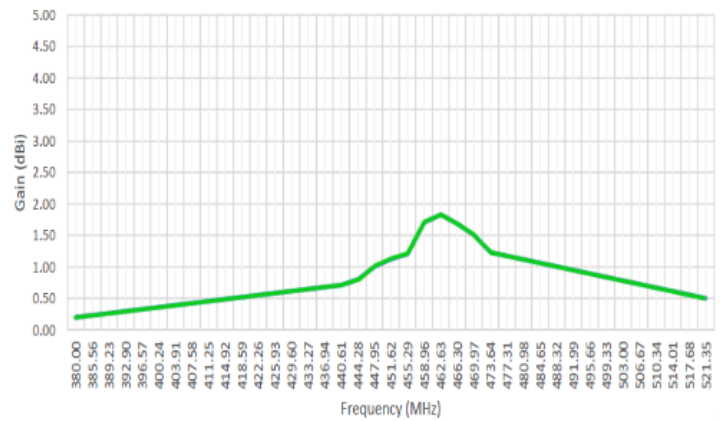
\*\*Specifications are subject to change without prior notice.



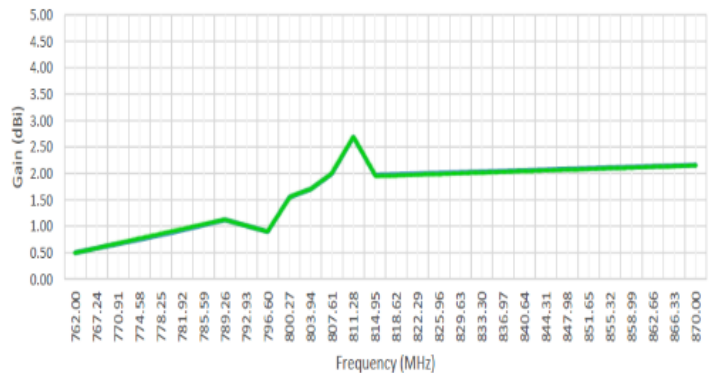
**Gain Pattern**  
**136-174MHz**



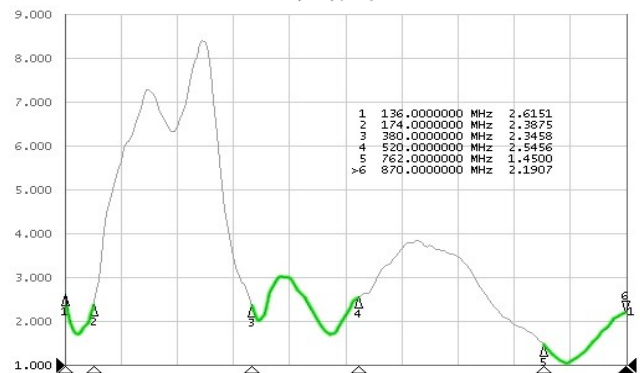
**Gain Pattern**  
**380-520MHz**



**Gain Pattern**  
**762-870MHz**



**VSWR**





The MADP136-174 antenna was designed for today's latest broadband VHF communications platforms for maritime, military, commercial, public safety and law enforcement applications.

The radiator element is designed for maximum durability and performance. The antenna radiator is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

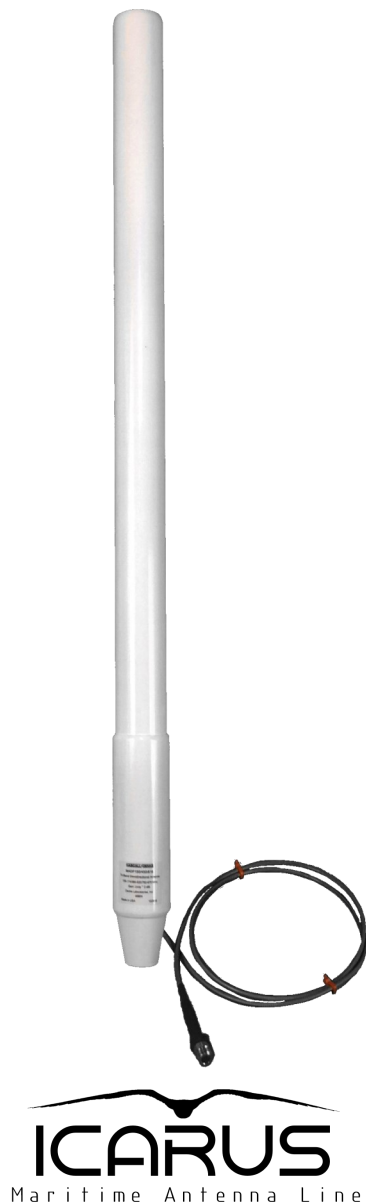
- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	136-174MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2:1 Typical (3.0:1 Max)
Gain	≥ 2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

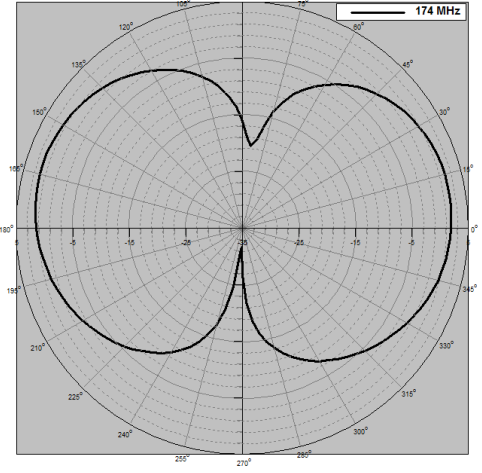
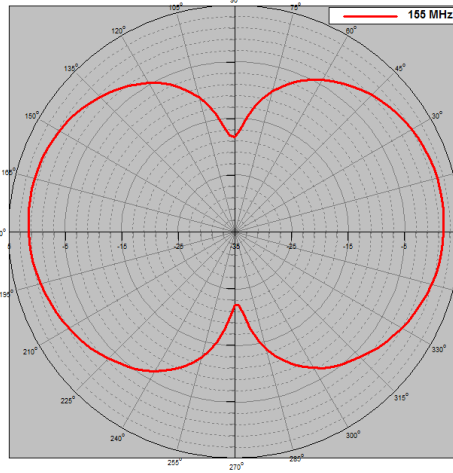
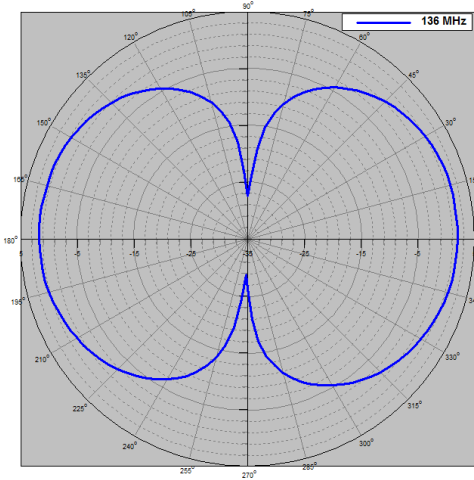
Design	Dipole
Height	42¼in. (1.02m) w/o extension
Diameter	2¼in. (57.15mm)
Radome	Fiberglass
Weight	5.5lbs. (205kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread
Color	White/Black/Green/Tan/Grey



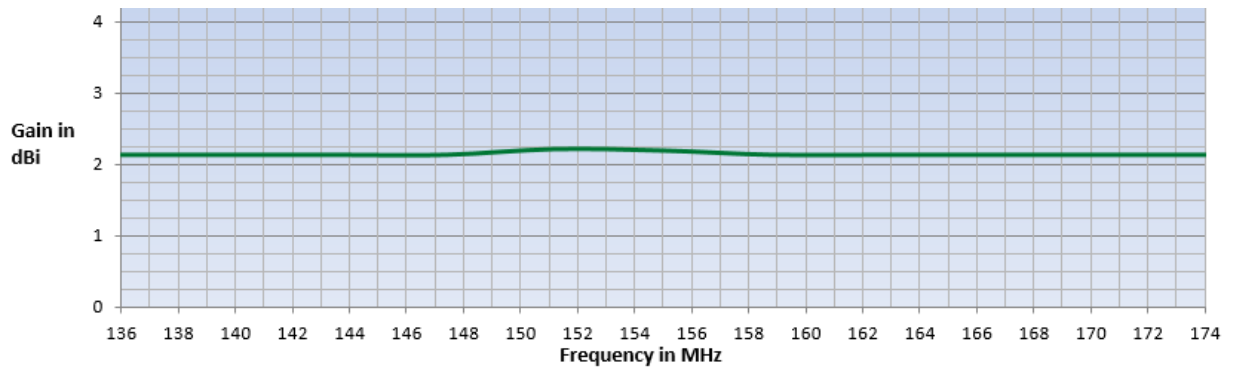
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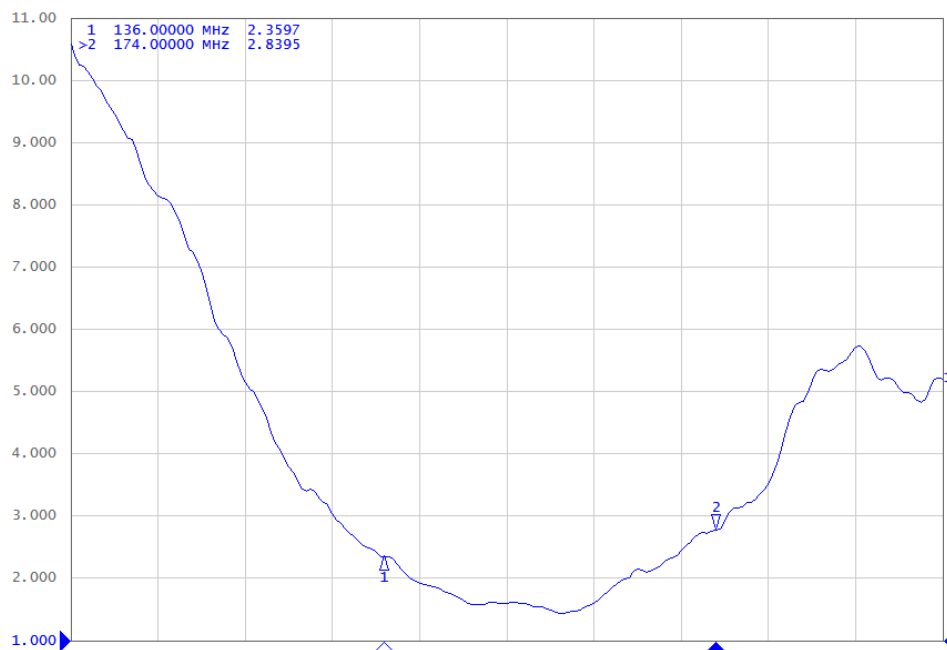
## Patterns



## Gain



## VSWR



The MADP156-162 was designed for Maritime Automatic Identification Systems (AIS) and VHF communications applications.

The radiator element is designed for maximum durability and performance. The antenna radiator is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	156-162MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	1.5:1 Typical (2:1 Max)
Gain	2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

Height	67in. (1.7m) w/o extension
Diameter	1½in. (57.15mm)
Radome	Fiberglass
Weight	4.5lbs. (2.04kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread Extension
Color	White/Black/Green/Tan/Grey



Pictured with extension

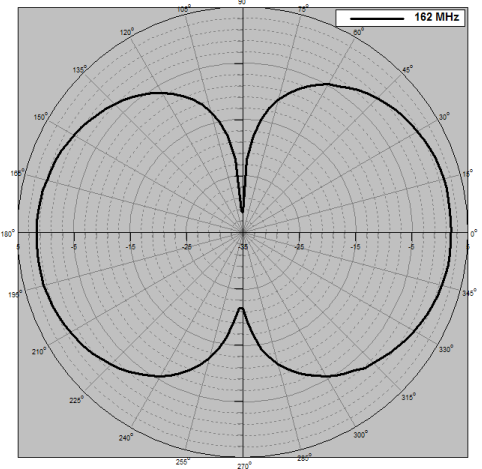
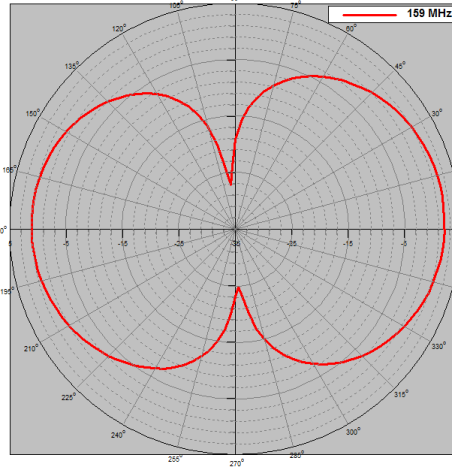
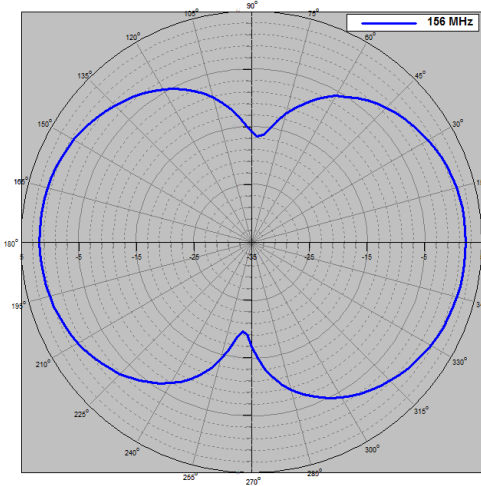
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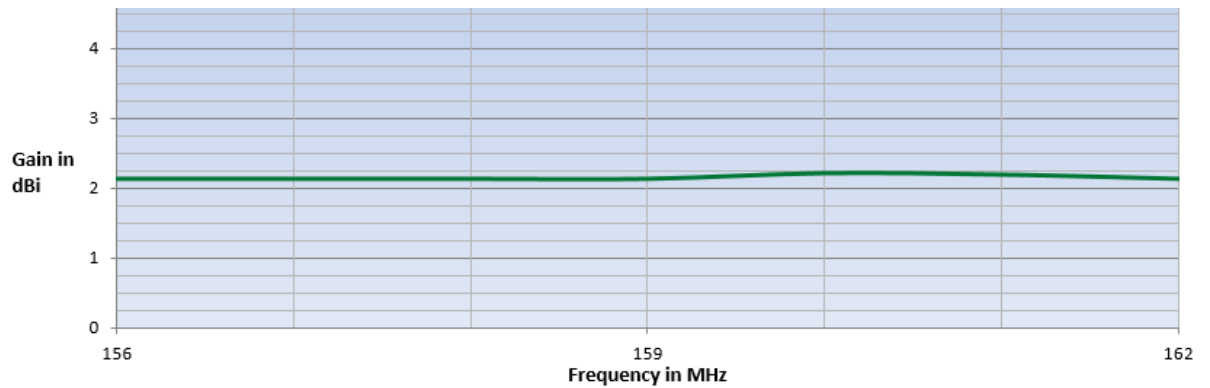
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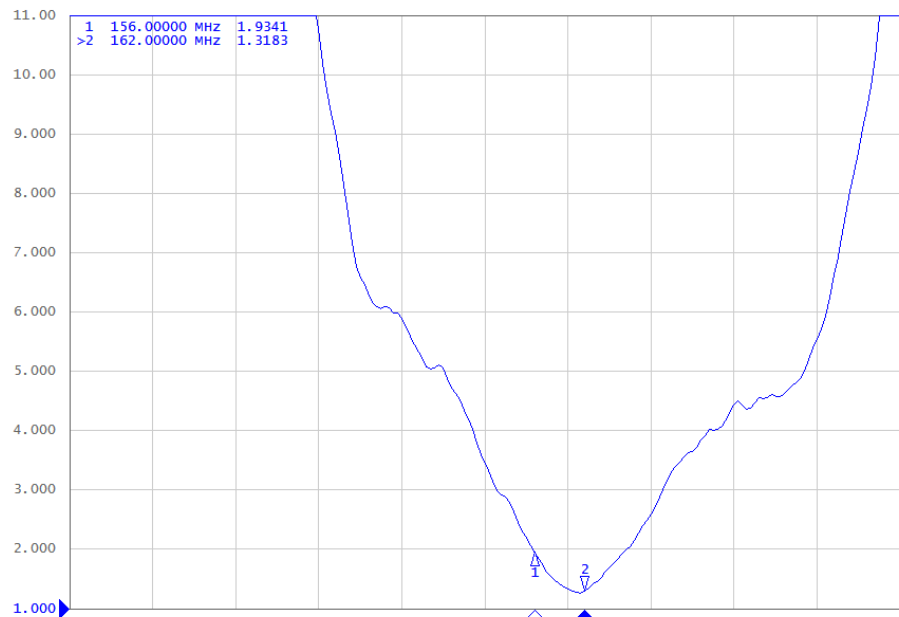
### Patterns



### Gain



### VSWR



The MADP156-162AB was designed for Maritime Automatic Identification Systems (AIS) and VHF communications applications.

The radiator element is designed for maximum durability and performance. The antenna radiator is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	156-162MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	1.5:1 Typical (2:1 Max)
Gain	2dBi
Pattern	Omni Directional Azimuth 360° Elevation 72°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

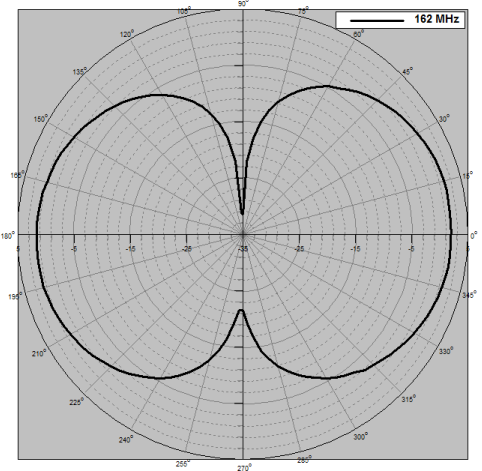
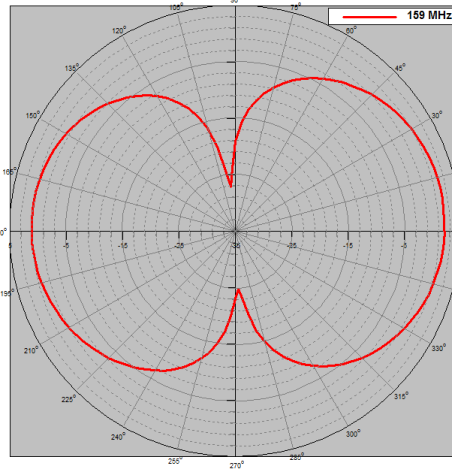
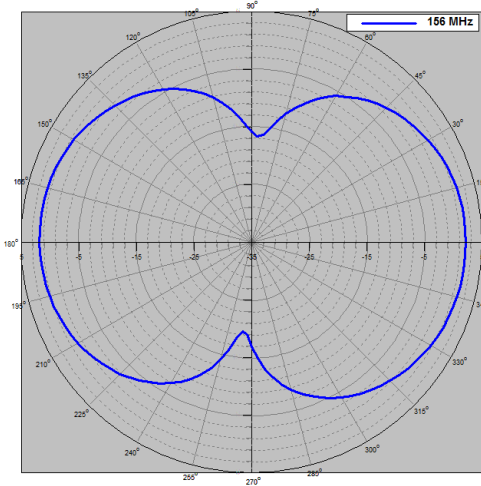
Height	67in. (1.7m) w/o flange
Diameter	1½in. (57.15mm)
Radome	Fiberglass
Weight	5.2 lbs. (2.36 kg.)
Wind load	150MPH Max (241kph)
Mounting	NATO Flange Base
Color	White/Black/Green/Tan/Grey



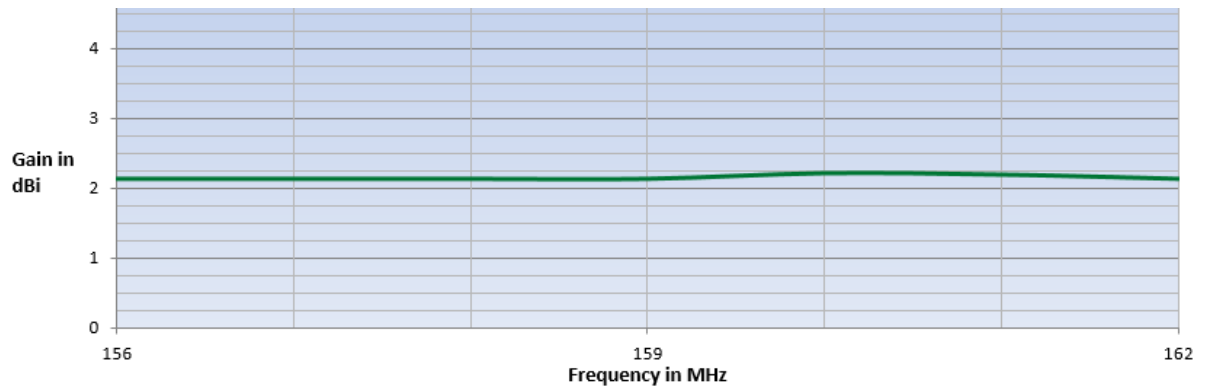
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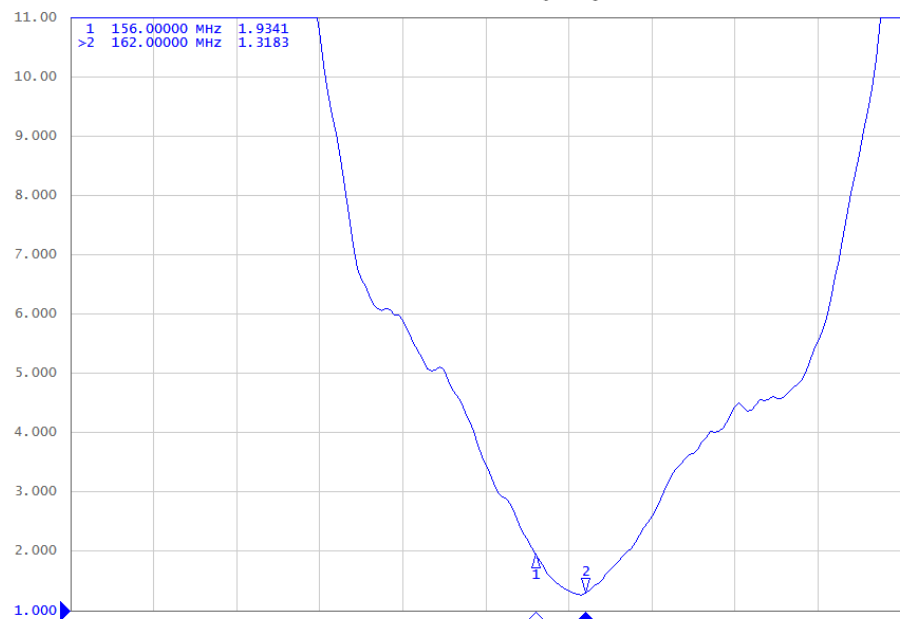
### Patterns



### Gain



### VSWR



The MADP225X2 antenna was designed for today's latest UHF communications platforms for maritime, military, commercial, public safety and law enforcement applications.

The antenna has a state-of-the-art radiating elements that provide maximum reliability and maximum performance. The antenna elements are sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

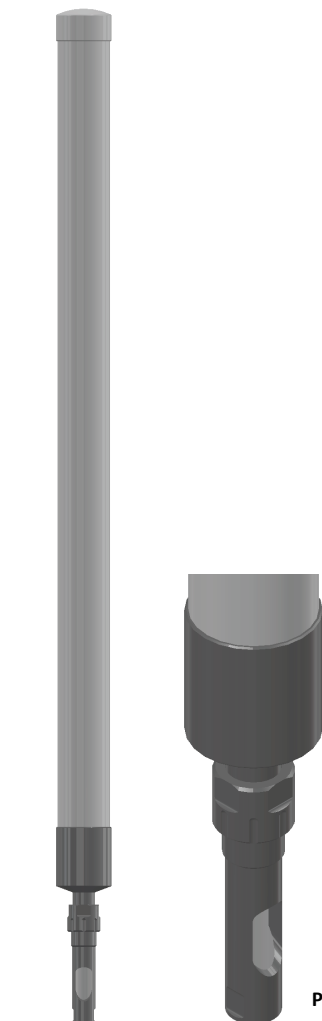
- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	225-400MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2.5:1 Typical (3.0:1 Max)
Gain	≥3 dBi Typical (2.5 dBi Band Edges)
Pattern	Omni Directional Azimuth 360° Elevation 52°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

Design	Dipole
Height	51 in. (1.3m) w/o extension
Diameter	3in.
Radome	Fiberglass
Weight	6.25 lbs. (2.84 kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread extension
Color	White/Black/Green/Tan/Grey



Pictured with extension

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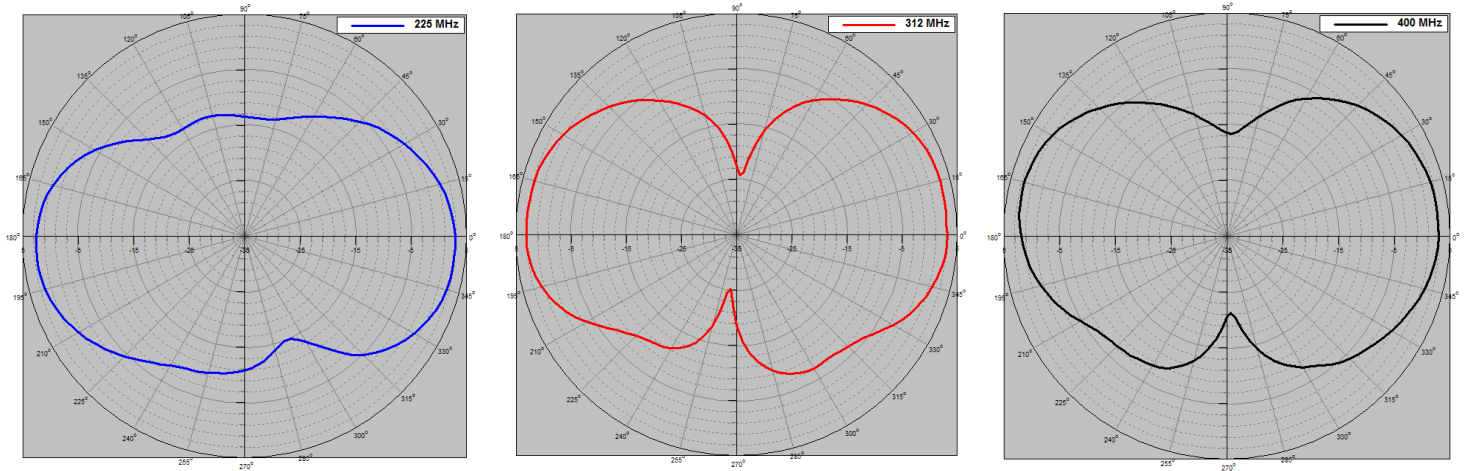
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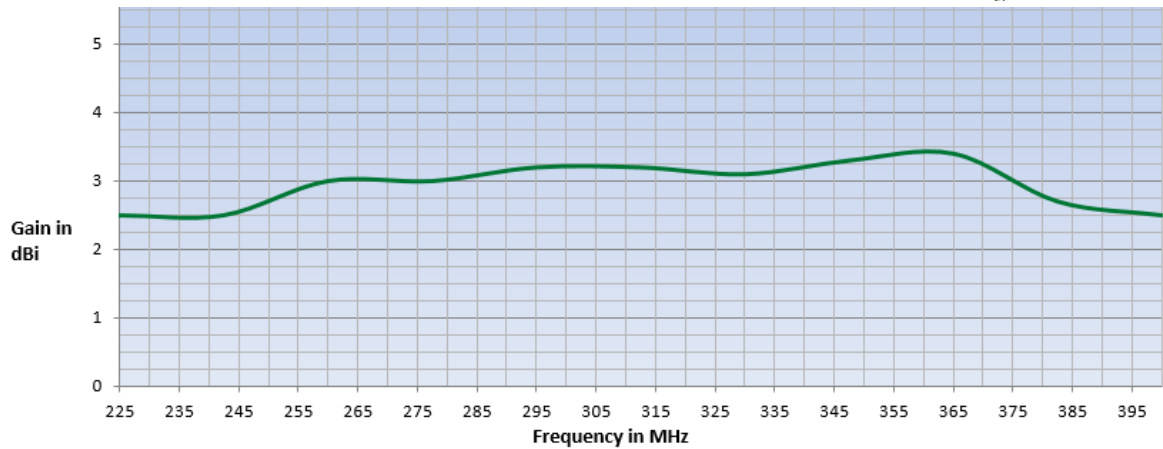




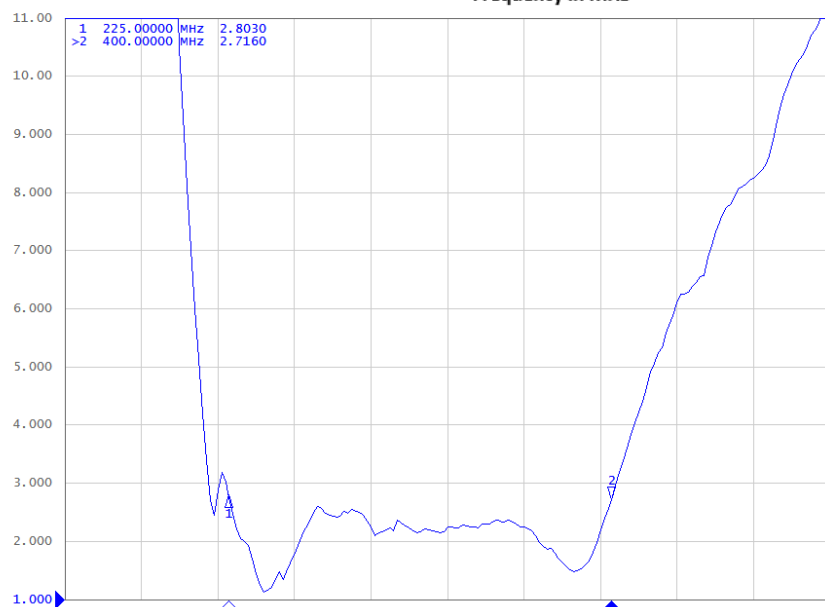
## Patterns



## Gain



## VSWR



The MADP380-490 broadband antenna was designed for today's latest communications platforms for maritime, military, commercial, public safety and law enforcement applications.

The antenna has a state-of-the-art radiating element that provides maximum reliability and maximum performance. The antenna element is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

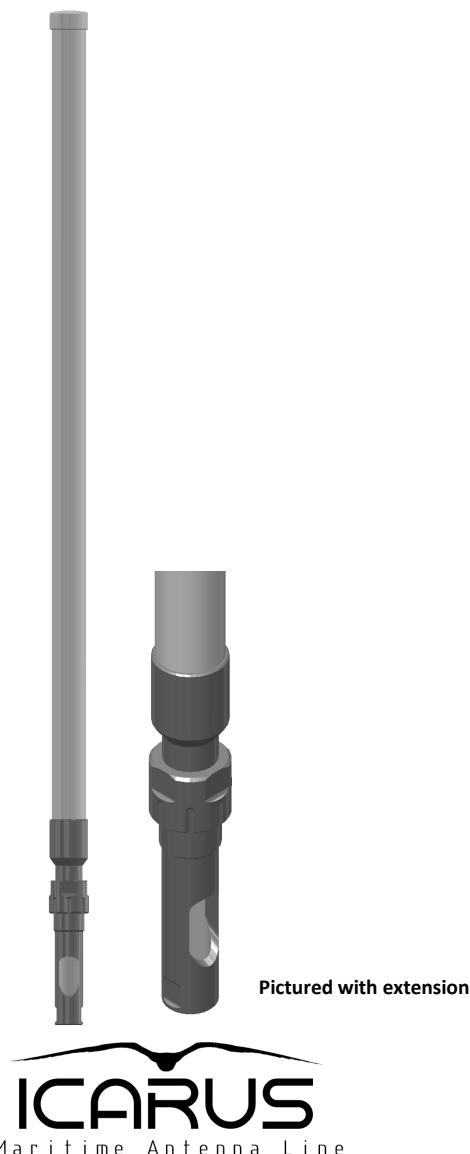
Frequency	380-490MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	2:1 Typical (2.5:1 Max)
Gain	≥ 4 dBi
Pattern	Omni Directional Azimuth 360° Elevation 46°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

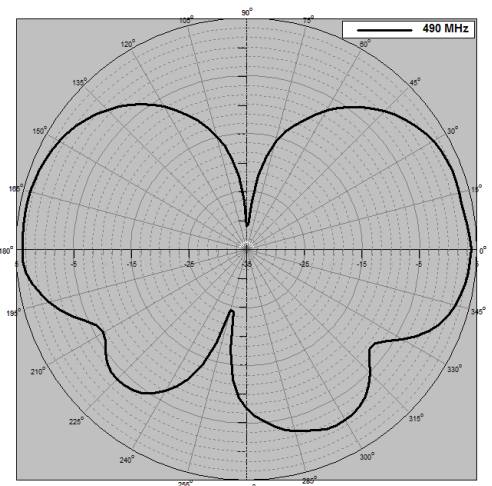
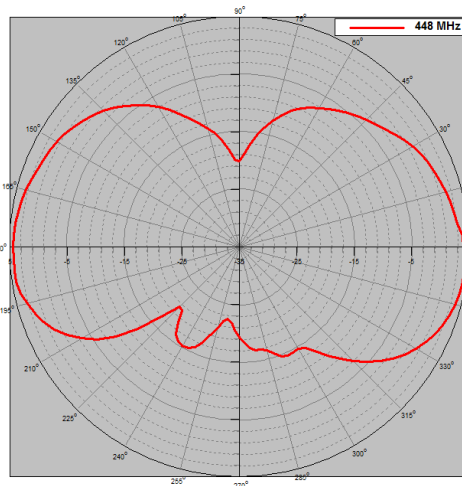
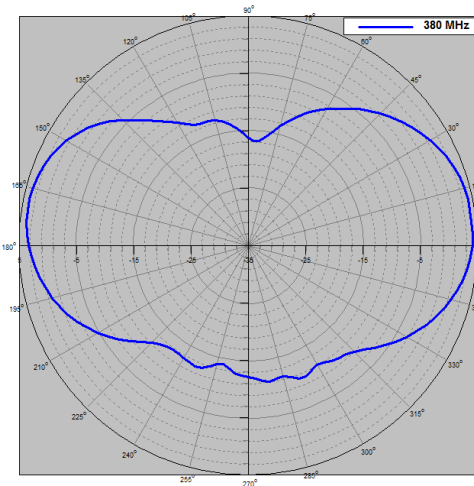
Design	Dipole
Height	40¼in. (1.02m) w/o extension
Diameter	1½in.
Radome	Fiberglass
Weight	2.5lbs. (1.3kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread extension
Color	White/Black/Green/Tan/Grey

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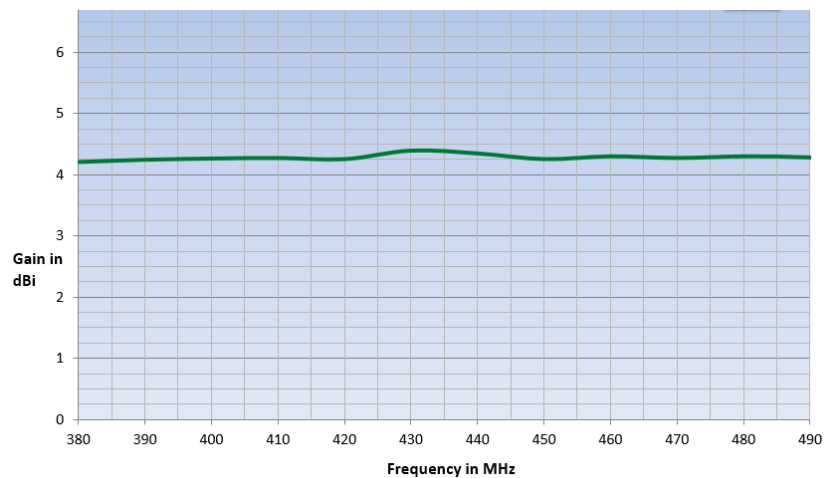
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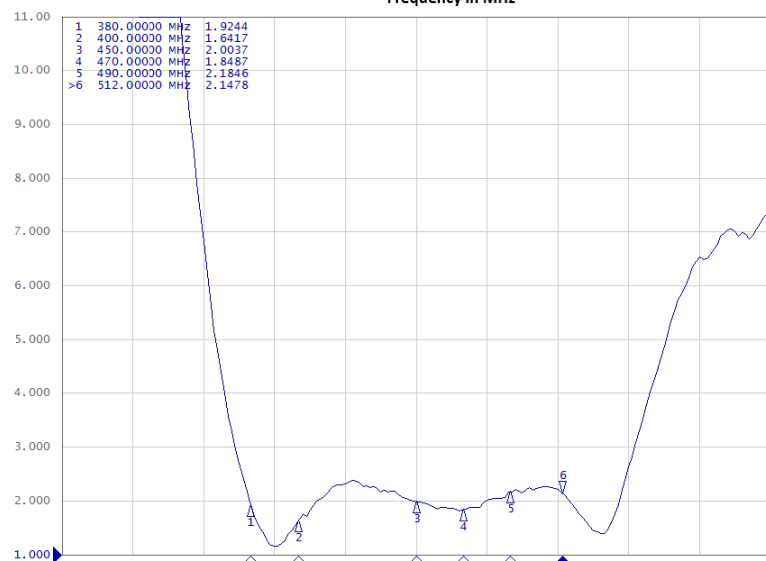
### Patterns



### Gain



### VSWR



The MADP762-870 antenna was designed for today's latest Land Mobile Radio (LMR) and Long Term Evolution (LTE) communications platforms for maritime, military, commercial, public safety and law enforcement applications.

The antenna has a state-of-the-art radiating element that provides maximum reliability and maximum performance. The antenna element is sealed in a heavy duty fiberglass radome for mechanical stability and reliability in harsh environments.

Being ground independent, this antenna can be mounted on various maritime platforms (metal or non-metal) with no degradation of performance.

### Features

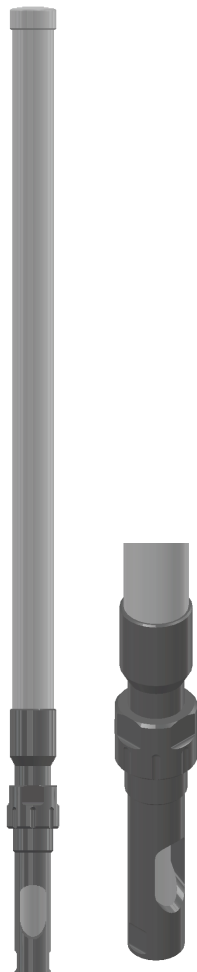
- Ground independent
- Single Input
- Built to MIL-STD-810

### Electrical Specifications

Frequency	762-870MHz
Polarization	Vertical
Impedance	50Ω Nominal
VSWR	≥ 2.0:1
Gain	4.5 dBi ± .5
Pattern	Omni Directional Azimuth 360° Elevation 46°
Power	50Watts
Connector	Type N Female

### Mechanical Specifications

Design	Dipole
Height	27¼in. (.69m) w/o extension
Diameter	1½in. (38.1mm)
Radome	Fiberglass
Weight	2.5lbs. (1.13kg.)
Wind load	150MPH Max (241kph)
Mounting	1" 14 Thread—Extension sold separate
Color	White/Black/Green/Tan/Grey



Pictured with extension

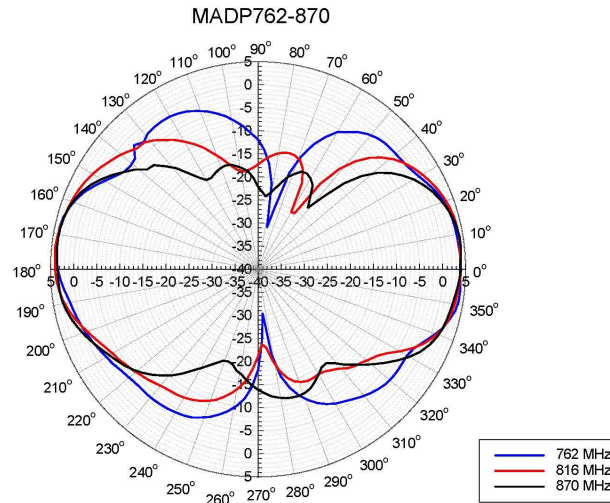
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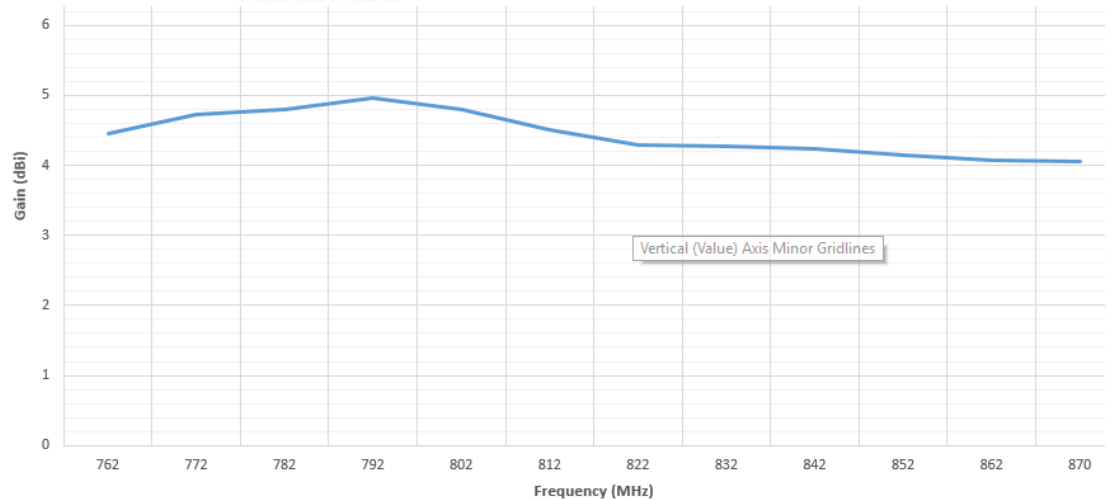
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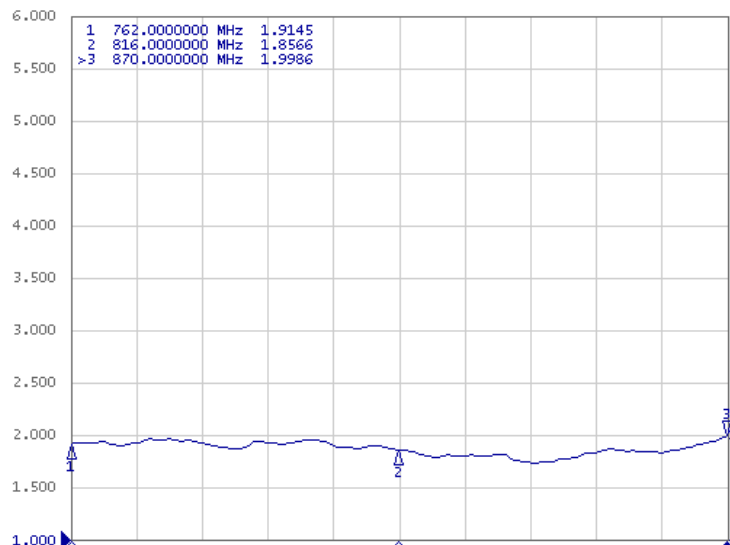
#### Pattern



#### Gain



#### VSWR







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