

# LAND BASED CATALOGUE

Antennas & Accessories



# 2018

# THE WORLD'S ULTIMATE ANTENNAS.



AC ANTENNAS 

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Antennas. They mean everything to us.

Since 1970, AC Antennas has been known for our relentless commitment in utilizing our +45 years of experience towards one pure goal: providing the best antennas in the world.

Today we have a large portfolio of marine, land based and portable antennas.

Our marine products are engineered and manufactured in Denmark to the highest possible quality level for vessels within the major marine markets of; commercial, fishing and yachting. All of our products are distributed worldwide through our professional partners.

We take pride in our products and our worldwide partners but even more in our loyal and faithful customers throughout decades.

Welcome to our world. Welcome to a world of antennas.



CX4

100011-T

Professional VHF-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- The benchmark 0 dBd VHF antenna for the maritime industry
- Recommended for AIS-solutions
- Can also be used for land based solutions

Specifications

Frequency

146-162.5MHz

Gain

0 dBd

Power

100W

VSWR

<1.5:1

Connector

UHF

Length

1.26m

Weight

0.5kg

Thread

1" and 1 1/4"

DC Shorted

Yes

DC Grounded

Yes



CX3 5/8

130002-T

Professional VHF-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- The benchmark 3 dBd VHF antenna for the maritime industry
- Recommended for AIS-solutions
- Can also be used for land based solutions

Specifications

Frequency

156-162.5MHz

Gain

3 dBd

Power

100W

VSWR

<1.5:1

Connector

UHF

Length

2.6m

Weight

0.7kg

Thread

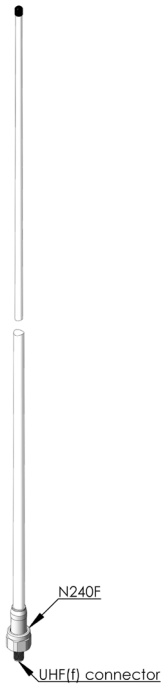
1" and 1 1/4"

DC Shorted

Yes

DC Grounded

Yes



CX4 types

Product name	Product number	Frequency [MHz]	Connector [female]	Mount included
CX4-1	100012-T	146-162.5	N	N240F
CX4-2	100038-T	146-162.5	UHF	N162F
CX4-3	100015-T	146-162.5	UHF	-
CX4-4	100039-T	146-162.5	N	N275F
CX4-5	100040-T	146-162.5	UHF	N171F
CX4-6	100017-T	146-162.5	N	-
CX4-8	100018-T	135-150	UHF	-
CX4-9	100019-T	118-137	N	-
CX4-11	100013-T	154-174	UHF	-
CX4-12	100014-T	154-174	N	-

CX3 5/8 types

Product name	Product number	Frequency [MHz]	Connector [female]	Mount included
CX3 5/8	130002-T	156-162.5	UHF	N240F
CX3 5/8-1	130003-T	156-162.5	N	N240F
CX3 5/8-10	130004-T	156-162.5	UHF	-





**THIS IS NOT AN ANTENNA.  
IT IS 20 PARTS  
THOROUGHLY PUT TOGETHER.**

**WE CRIMP OUR ANTENNAS.  
4-5 TIMES STRONGER BUILD-UP  
DUE TO CRIMPING.**



## CELmar0-1

100000-P

Stainless steel sailboat omnidirectional VHF-antenna, suitable for rail or mast mounting:

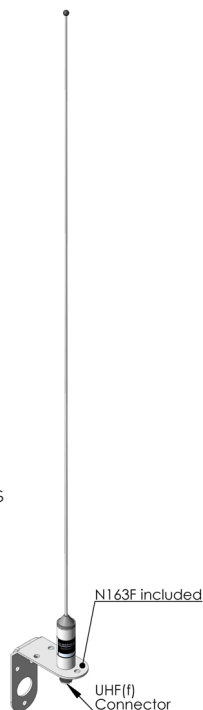
- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment conditions
- Tunable version available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Available with fibreglass radome too: CELmarVHF and CELmar1-1
- Can also be used for land based solutions

### Specifications

Frequency **156-162.5MHz** Gain **0 dBd** Power **100W** VSWR **<1.5:1**

Connector **UHF** Length **1.0m** Weight **0.4kg** Thread **5/8" 24TPI**

DC Shorted **No** DC Grounded **Yes**



## CELmar2-1

100005-P

High quality lightweight omnidirectional fibreglass antenna, equipped with ferrule:

- Excellent RF specifications
- Exceptional material quality
- Installation directly onto 1"-14TPI mounts
- Cable length variants available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Can also be used for land based solutions

### Specifications

Frequency **156-162.5MHz** Gain **0 dBd** Power **100W** VSWR **<1.5:1**

Cable **RG58C/U** Length **1.05m** Weight **0.6kg** Thread **1" ferrule**

DC Shorted **No** DC Grounded **No**



## CELmar3-1

130000-P

High quality lightweight omnidirectional fibreglass antenna, equipped with ferrule:

- Excellent RF specifications
- Exceptional material quality
- Installation directly onto 1"-14TPI mounts
- Various cable length variants available
- Recommended for AIS-solutions
- Suitable for DAB/FM reception
- Can also be used for land based solutions

### Specifications

Frequency **156-162.5MHz** Gain **3 dBd** Power **100W** VSWR **<1.5:1**

Cable **RG58C/U** Length **2.7m** Weight **0.9kg** Thread **1" ferrule**

DC Shorted **Yes** DC Grounded **Yes**



## VHFlight100

100024-C

Omnidirectional whip antenna in glass fibre suitable for leisure boats etc. The antenna is equipped with the installation friendly Celwave base:

- Excellent RF specifications
- Exceptional material quality
- Various cable and mounts available
- Suitable for DAB/FM reception

### Specifications

Frequency **156-162.5MHz** Gain **0 dBd** Power **100W** VSWR **<1.5:1**

Connector **UHF** Length **1.14m** Weight **0.3kg** Thread **1" ferrule**

DC Shorted **No** DC Grounded **Yes**





**KUM480****248000-P**

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coach only
- Sidefed
- Various mechanical installation options including ferrule and wall mounting
- Can also be used for land based solutions

**Specifications**

Frequency <b>1.4-30MHz</b>	Power <b>500W</b>	Max HF Voltage <b>9kV</b>
Sections <b>2</b>	Length <b>4.8m</b>	Weight <b>2kg</b>
	Static Capacity <b>55pF</b>	

**KUM600****260000-P**

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coach only
- Sidefed
- Various mechanical installation options including ferrule and wall mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency <b>1.4-30MHz</b>	Power <b>750W</b>	Max HF Voltage <b>9kV</b>
Sections <b>2</b>	Length <b>6m</b>	Weight <b>2.5kg</b>
	Static Capacity <b>70pF</b>	

**KUM803****280300-T**

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coax only
- Sidefed
- Various mechanical installation options including wall and deck mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency <b>1.4-30MHz</b>	Power <b>1200W</b>	Max HF Voltage <b>18kV</b>
Sections <b>3</b>	Length <b>8m</b>	Weight <b>7kg</b>
	Static Capacity <b>100pF</b>	

**KUM903****290300-T**

Professional HF/SSB-antenna recommended by major radio manufacturers:

- Excellent RF specifications
- Exceptional material quality
- Works with Automatic Tuner Unit systems
- Wire and coax cable installations
- Tx/Rx or Rx only
- 0.15-30MHz for Rx coax only
- Sidefed
- Various mechanical installation options including wall and deck mounting
- Available as 2- and 3-section models
- Can also be used for land based solutions

**Specifications**

Frequency <b>1.4-30MHz</b>	Power <b>1200W</b>	Max HF Voltage <b>18kV</b>
Sections <b>3</b>	Length <b>9m</b>	Weight <b>8kg</b>
	Static Capacity <b>100pF</b>	



**KUM121**

212100-T

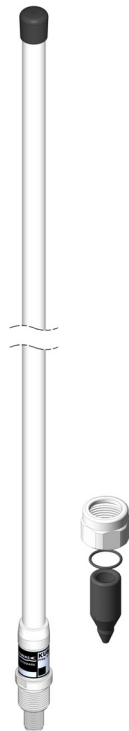
Professional HF-antenna recommended by major radio manufacturers:

KUM121 is a high quality omnidirectional active receiving HF antenna with excellent dynamic range in the entire bandwidth.

- Excellent RF specifications
- Exceptional material quality
- Low noise figure
- Diode protection of RF and DC inputs
- Grounded through mounting base
- Can also be used for land based solutions

**Specifications**

Frequency	DC Shorted	DC Grounded	Gain
0.15-30MHz	No	Yes	0dB
Connector	Length	Weight	IP2
UHF	1.3m	0.5kg	≥+50dBm
			IP3
			≥+28dBm
Supply Voltage	Max Supply Current	Max Output	
9-12V	35 mA	+10dBm	

**KUM041**

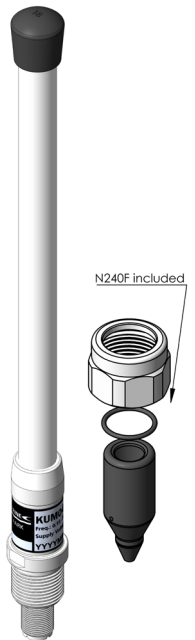
204100-T

KUM041 is a high quality omnidirectional active receiving HF antenna with excellent dynamic range in the entire bandwidth.

- Excellent RF specifications
- Exceptional material quality
- Low noise figure
- Diode protection of RF and DC inputs
- Grounded through mounting base
- Can also be used for land based solutions

**Specifications**

Frequency	DC Shorted	DC Grounded	
0.15-30MHz	No	Yes	
Connector	Length	Weight	IP3@10MHz
UHF	0.4m	0.4kg	≥+38dBm
Supply Voltage	Max Supply Current		
9-12V	30 mA		

**NUKA ARCTICA****SEA TRIAL VESSEL FOR KUM121, APRIL-JUNE 2016.**



**QUALITY.  
TO PROFESSIONALS.  
BY PROFESSIONALS.**





**CXU1****300000-T**

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
450-470MHz	0 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	0.8m	0.5kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		

**CXU3****330000-T**

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
450-470MHz	3 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	1.4m	0.7kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		

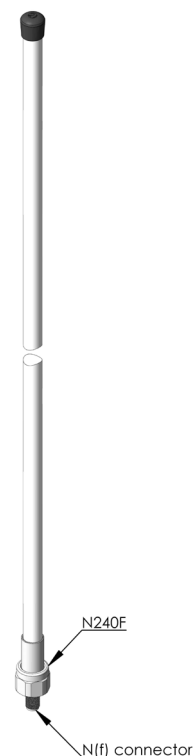
**CXU4****350000-T**

For use with radio telephone, two-way business radio and many other applications:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Various sub band antennas available
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
440-470MHz	5 dBd	100W	<1.5:1
Connector	Length	Weight	Thread
N	2.2m	2.1kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		

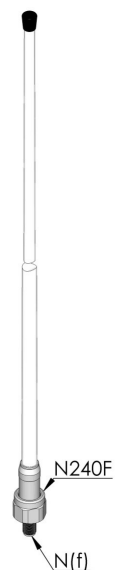
**UHF/VHF2****400036-T**

Omnidirectional dipole antenna covering two bands, marine VHF and mid -UHF sub-band:

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	Gain	Power	VSWR
146-162.5&420-440MHz	0 dBd	100W	<1.5/5:1
Connector	Length	Weight	Thread
N	1.3m	0.6kg	1" and 1 1/4"
DC Shorted	DC Grounded		
Yes	Yes		



## 4GMultiband

400006-T

Omnidirectional multiband antenna covering the cellular phone network bands simultaneously with data transmission, thus improving the communication performance for e.g. 3G, 4G, CDMA, UMTS, DECT, WLAN, GSM850/900/1800/1900, Bluetooth and EDGE:

- Excellent RF specifications
- Exceptional material quality
- Can also be used for land based solutions



## Specifications

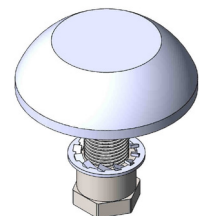
Frequency	Gain	Power	VSWR
806-960/1710-2690MHz	0 dBd	40W	<2/2.2:1
Connector	Length	Weight	Thread
N	0.5m	0.3kg	1" and 1 1/4"
DC Shorted	DC Grounded		
No	Yes		

## GPS

490000-P

Marine and land based antenna for the frequency 1575.42 MHz band. The GPS antenna can be installed directly on the deck, it withstands walking pressure:

- Excellent RF specifications
- Exceptional material quality
- Can also be used for land based solutions



## Specifications

Frequency	Gain	Supply voltage	VSWR
1575.42MHz	26dB	3-5.5V	<2:1
Connector	Length	Weight	Noise Figure
FME	0.05m	0.06kg	Typ. 1.35dB
DC Shorted	DC Grounded		
No	Yes		

## VHF/GPS

490001-T

VHF/GPS is a VHF antenna with a combined helix GPS and GLONASS antenna for frequencies 1575.42 MHz & 1602 MHz incorporated:

- Excellent RF specifications
- Exceptional material quality
- Cable sets with filter available
- Designed for harsh environment
- Can also be used for land based solutions

## Specifications

Frequency	Power	VSWR
156-162.5/1575.42/1602MHz	35W	<2:1
Connector	Length	Weight
N	1.1m	0.7kg
Thread		
1" and 1 1/4"		
Supply voltage	Current	Gain
3.3-18V	Max 10, typ 7mA	0/18/18 dB
DC Shorted	DC Grounded	
No	Yes	



## VHF/GPS types

Product name	Product number	Cable 1 connector	Cable 2 connector	Cable 3 connector
VHF/GPS	490001-T	-	-	-
VHF/GPS-01	490011-T *	N-female	UHF-male	-
VHF/GPS-02	490012-T *	BNC-female	TNC-male	-
VHF/GPS-03	490013-T *	N-female	N-male	TNC-male
VHF/GPS-04	490014-T *	TNC-male	UHF-male	-
VHF/GPS-05	490015-T *	BNC-male	TNC-male	UHF-male

No\*: VHF/GPS antenna and filter included

**DAB-FM****400035-T**

Professional omnidirectional dipole receiving antenna covers both the DAB frequency (160-250MHz) and the FM frequency (88-108MHz):

- Excellent RF specifications
- Exceptional material quality
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	88-108/160-250MHz		
Connector	N	Length	1.3m
		Weight	0.5kg
		Thread	1" and 1 1/4"
DC Shorted	Yes	DC Grounded	Yes

**FAME1****400004-T**

High quality fiberglass omnidirectional receiving DAB/FM/AM antenna:

- Excellent RF specifications
- Exceptional material quality
- Also available with 1" ferrule and sidedef cable
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	0.15-30/88-108/160-250MHz		
		Gain	0 dBd
Connector	UHF	Length	1.3m
		Weight	0.5kg
		Thread	1" and 1 1/4"
DC Shorted	No	DC Grounded	Yes

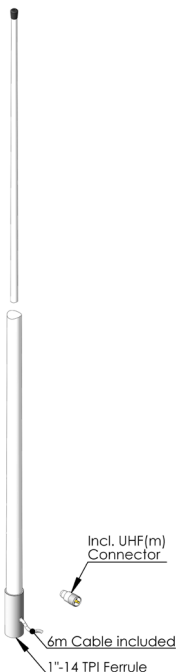
**CB6****100051-P**

Lightweight fibreglass omnidirectional antenna for the citizen band:

- Excellent RF specifications
- Exceptional material quality
- Sidedef
- Designed for harsh environment

**Specifications**

Frequency	26.8-27.5MHz		
		Gain	3 dBd
		VSWR	<1.5:1
Cable	RG58C/U	Length	2.7m
		Weight	0.8kg
		Thread	1" ferrule
DC Shorted	Yes	DC Grounded	Yes

**FAME3****430012-T**

High quality fiberglass omnidirectional receiving DAB/FM/AM antenna:

- Excellent RF specifications
- Exceptional material quality
- Also available with 1" ferrule and sidedef cable
- Designed for harsh environment
- Can also be used for land based solutions

**Specifications**

Frequency	0.15-30/88-108/160-250MHz		
		Gain	3 dBd
Connector	UHF	Length	2.7m
		Weight	0.6kg
		Thread	1" and 1 1/4"
DC Shorted	No	DC Grounded	Yes





**MORE THAN 90% OF OUR ORDERS  
ARE SHIPPED WITHIN 48 HOURS.**



**N274F**

900060-B



Universal Pole    Ø20-58mm  
 Anodised Aluminium, black  
 0.8kg    1 1/4"-11 TPI, male

**N274FW**

900061-B



Universal Pole    Ø20-58mm  
 Anodised Aluminium, white  
 0.8kg    1 1/4"-11 TPI, male

**N275F**

900018-B



Universal Pole    Ø20-58mm  
 Anodised Aluminium, black  
 0.7kg    1" 14 TPI, female

**N275FW**

900062-B



Universal Pole    Ø20-58mm  
 Anodised Aluminium, white  
 0.7kg    1" 14 TPI, female

**N270F**

900017-B



Heavy duty Pole    Ø30-75mm  
 Solid Brass, white  
 1.4kg    1 1/4"-11 TPI, male

**N298F**

900027-P



Universal Pole    Ø26-46mm  
 Stainless Steel  
 0.8kg    1 1/4"-11 TPI, male

**N220F**

900013-P



Universal Pole    Ø26-46mm  
 Stainless Steel  
 0.5kg    1"-14 TPI, male

**N285F**

900044-B



4-way Racket    Deck/wall  
 Chrome Brass  
 1.0kg    1"-14 TPI, male

**E179F**

900037-B



Deck  
 Chrome brass    Deck  
 0.7kg    1 1/4"-11 TPI, male

**E180F**

900038-B



Deck  
 Stainless steel  
 0.3kg    1 1/4"-11 TPI, male

**N288F**

900046-B



Deck  
 Stainless steel  
 0.7kg    1"-14 TPI, male

**N286F**

900045-B



4-way Racket    Deck/wall  
 Stainless Steel  
 0.7kg    1"-14 TPI, male



**N157F**

900002-P



Universal Pole Ø20-26mm

SS316 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, female

**N158F**

900003-P



Universal Pole Ø20-26mm

SS316 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, male

**N162F**

900004-P



Universal Pole

SS304 Ø5/8" &amp; Ø1"

0.2kg 1"-14 TPI, female

**N290F**

900047-B



4-way ratchet Deck/wall

Nylon

0.3kg 1"-14 TPI, male

**N171F**

900006-B



Universal Pole Ø30-61mm

SS316

0.7kg 1"-14 TPI, female

Option with ferrule bolt: N171FB

**N172F**

900008-B



Universal Pole Ø30-61mm

SS316 Alignment beads

0.6kg 1"-14 TPI, female

Option with ferrule bolt: N172FB

**N173F**

900010-B



Universal Pole Ø49-90mm

SS316 Alignment beads

0.8kg 1"-14 TPI, female

Option with ferrule bolt: N173FB

**N174F**

900057-B



Universal Pole Ø30-61mm

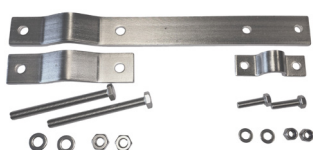
SS316 Alignment beads

0.7kg 1"-14 TPI, female

Option with ferrule bolt: N174FB

**N095F**

900000-B



Pole clamp Ø30-100mm

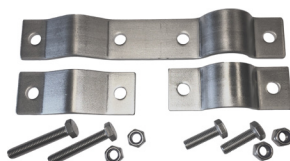
SS316

1.2kg Ø21mm radome

Note: Set of 2\*N095F per antenna

**N115F**

900001-B



Pole clamp Ø38-70mm

SS316

1.8kg Ø40mm radome w/sleeve

Note: Set of 2\*N115F per antenna

**N245F**

900039-P



Pole clamp Ø31-60mm

SS316

0.4kg Fits e.g. CX4-3

**H022F**

990013-A



Insulator

PBT 100 kV

0.3kg 9 kN



**N280-01F**

900019-P



Adaptor Lateral cable hole  
 Chrome brass  
 0.2kg 2 \* 1"-14 TPI, female

**N280-03F**

900021-P



Adaptor Lateral cable hole  
 Chrome brass  
 0.4kg  
 1" 14 TPI female & 1 1/4" 11 TPI male

**N280-04F**

900022-P



Adaptor  
 Chrome brass  
 0.3kg  
 1" 14 TPI female & 1 1/4" 11 TPI male

**N280F**

990009-P



Adaptor & cable Lateral cable hole  
 Chrome brass UHF male  
 0.6kg RG58 cable 6m  
 1" 14 TPI female & 1 1/4" 11 TPI male

**H001F**

990017-P



Cable feed-through RG213  
 Stainless steel  
 0.1kg Option RG58: H010F

**H012F**

990012-P



Cable feed-through  
 PVC RG58 & RG213  
 0.1kg

**CA-58-060**

920021-A



RG58 cable 6m  
 FME-female connectors on cable  
 0.4kg  
 UHF-male adaptor enclosed

**CA-213-250**

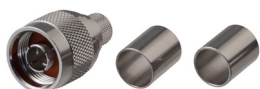
920027-A



RG213 cable 25m  
 FME-female connectors on cable  
 4kg  
 UHF-male adaptor enclosed

**N**

910001-A



Connector RG213/RG214  
 Crimp  
 0.1kg N-male

**K008F**

910009-A



Connector RG213/RG214  
 Crimp  
 0.1kg UHF-male

**BNC**

910000-A



Connector RG58  
 Crimp  
 0.1kg BNC-male

**R003F**

920016-A



RG58 cable 100m  
 4.2kg Option: RG213

Gain Reference

Gain is one of the main parameters of an antenna. The gain of an antenna is a figure stating how much energy this antenna transmits/receives in the main direction, compared to a reference antenna.

$$\text{Gain} = 10 \log \left( \frac{\text{ant.}}{\text{reference ant.}} \right)$$

Hypothetical the reference antenna is isotropic, which uniformly distributes energy in all directions.

This gain is stated as dBi.

Normally the reference antenna is a half wave dipole antenna and then the unit is dBd.

Conversion between the two follows this simple equation:

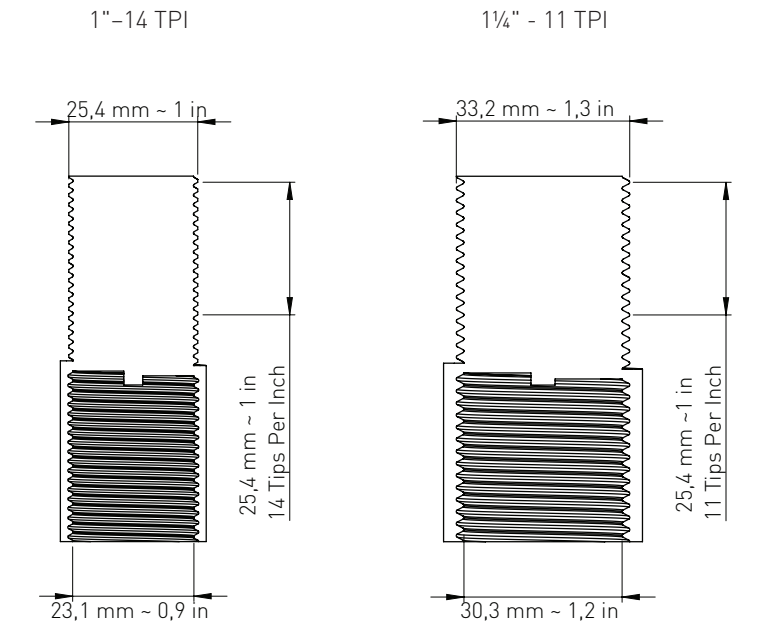
$$\text{dBd} = \text{dBi} - 2.15$$

For marine use in most countries the gain is mentioned in "marine" dB which is non-existing. However, as the competition is using "marine" dB, AC Marine has decided to indicate gain in dBd and "marine" dB.

Below please find a table of relationship between dBd,dBi and "Marine" dB.

dBd	dBi	Marine dB
0	2.1	3
3	5.1	6
4.5	6.6	9
5	7.1	10

Mount Reference



**MORE THAN 45 YEARS IN BUSINESS.  
THANKS TO OUR CUSTOMERS.**



Our products are designed and manufactured to provide exceptional performance and to withstand punishment from the rigorous environment.

We use latest generation of technology to continue pushing technical performance for the betterment of our products. Navigating complexity, unlocking potential.

We are cost effective and deliver on time. Always.

Welcome to AC Antennas.



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