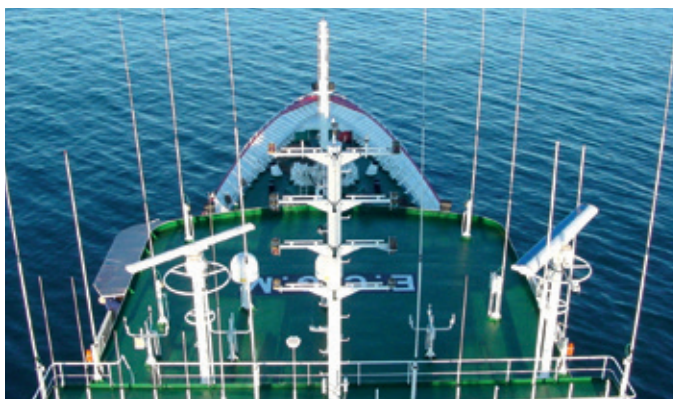


MARINE CATALOGUE

Antennas & Accessories



The world's ultimate antennas



Antennas. They mean everything to us.

In a world where two-thirds of the globe is covered by water, marine antenna products are our world.

Since 1970, AC Antennas has been known for our relentless commitment in utilizing our 40 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.



Marine Antennas

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149–162.5 MHz · CELmar VHF

GENERAL DESCRIPTION

CELmar0-1
Stainless steel sailboat antenna, suitable for rail or mast mounting.

CELmar1-1
High quality fibreglass antenna, suitable for rail or mast mounting.

CELmar2
Lightweight fibreglass antenna for installation directly on 1" - 14 TPI mounts. Available in 3 versions either with 6 m (20ft), 10 m (32ft) or 18 m (60ft) cable.

CELmarVHF
Slim fiberglass sailboat antenna, suitable for rail or mast mounting.

Note: The CELmar0-1 and CELmar2 antenna series are available in different variants - check pricelist for more info or contact us.



ELECTRICAL SPECIFICATIONS

Model:	CELmar0-1	CELmar1-1	CELmar2-1	CELmar2-2	CELmar2-3	CELmarVHF
Frequency Range - [MHz]	156-162.5	149-162.5	156-162.5	156-162.5	156-162.5	156-162.5
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	0/3	0/3	0/3	0/3	0/3	0/3
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Connector Termination	UHF Female	UHF Female	6 m/20 ft. RG58C/U Cable	18 m/60 ft RG58C/U Cable	10 m/32 ft RG58C/U Cable	UHF Female
Power rating [watt]	100	100	100	100	100	100
Impedance - [Ω]	50	50	50	50	50	50
DC-shorted	No	Yes	No	No	No	No

MECHANICAL SPECIFICATIONS

Model:	CELmar0-1	CELmar1-1	CELmar2-1	CELmar2-2	CELmar2-3	CELmarVHF
Length (m/ft.)	1.0/3.3	1.26/4.1	1.04/3.4	1.04/3.4	1.04/3.4	1.0/3.1
Weight (kg/lbs.)	0.36/0.8	0.38/0.84	0.52/1.2	1.0/2.2	0.7/1.6	0.2/0.44
Mounting Supplied	Mast Bracket Incl N163F	5/8" 24 TPI Fits N163F	1"-14 TPI ferrule	1"-14 TPI ferrule	1"-14 TPI ferrule	Mast Bracket Incl N163F



146–162.5 MHz · VHF

GENERAL DESCRIPTION

GP2M 5/8

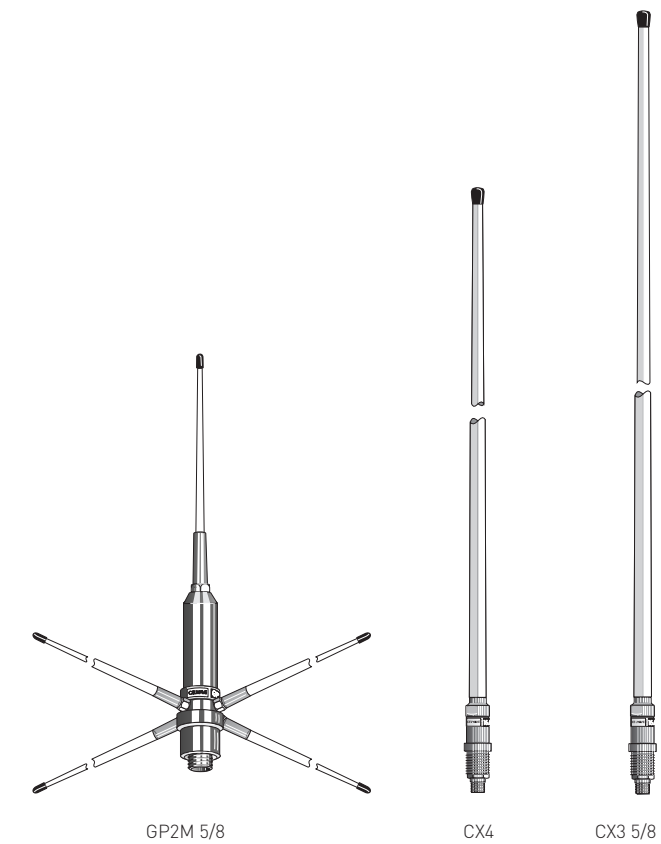
A 5/8 wave lenght ground plane antenna. Suitable for fishing and commercial vessels, designed for mounting on a 27 mm (0.9”) pipe. The GP2M 5/8 (GP2M 5/8-2) can also be supplied for the frequency range 146-174 MHz with a cutting chart included.

CX4

The AC Antennas bestseller throughout many years. The CX4 has a wide vertical radiation pattern and is suitable for all types of vessels. Note the wide frequency bandwidth.

CX3 5/8

The CX3 5/8 VHF marine antenna is designed for today’s high performance power boats, fishing and commercial use. The antenna provides 3 dBd gain for maximum performance even sailing the high seas.



ELECTRICAL SPECIFICATIONS

Model:	GP2M 5/8	CX4	CX3 5/8
Frequency Range - [MHz]	156-162.5	146-162.5	156-162.5
VSWR	< 1.5:1 @ F _C ±1% < 2.0:1 @ F _C ±2%	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	3/6	0/3	3/6
Polarization	Vertical	Vertical	Vertical
Connector Termination	UHF-Female	UHF-Female	UHF-Female
Power Rating [watt]	250	100	100
Impedance - [Ω]	50	50	50
DC-shorted	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	GP2M 5/8	CX4	CX3 5/8
Length - [m/ft.]	0.88/3.0	1.26/4.1	2.58/8.5
Weight - [kg/lbs.]	3/6.6	0.5/1.10	0.67/1.5
Mounting Supplied	-	See right column	See right column

DIFFERENT TYPES

Type:	Frequency [MHz]	Connector Female	Mounting Supplied
CX4-1	146-162.5	N	N240F
CX4-2	146-162.5	UHF	N162F
CX4-3	146-162.5	UHF	-
CX4-4	146-162.5	N	N275F
CX4-5	146-162.5	UHF	N171F
CX4-6	146-162.5	N	-
CX4-8	135-150	UHF	-
CX4-9	118-137	N	-
CX4-11	154-174	UHF	-
CX4-12	154-174 With	N	-
CX3 5/8-10	156-162.5	UHF	-
GP2M 5/8-2	±1% BW	UHF	-

Option: Upon order of large quantities we can tailor make the antenna to a specific center frequency.

146–162.5 MHz · VHF

GENERAL DESCRIPTION

CELmar3

Mariner's favorite in many countries due to its excellent performance and dependability. Best in both gain and pattern. For installation directly on 1"–14 TPI mounts.

CELmar4

High quality VHF antenna. Same specifications/manufactured like best seller CX4. Only difference being the CELmar4 has a chrome ferrule and 18 m RG58 cable.

PD4-5

The PD4-5 antenna is more efficient than the CELmar3. Its 2.9 m [9"] length provides improved performance, however it does not need an upper support. The PD4-5 is the choice of many pleasure boat owners as well as large commercial vessels.

PD55-5 and PD66-6

These 2 VHF antennas feature excellent performance. For installation on 1"–14 TPI mounts together with N200F upper support.



ELECTRICAL SPECIFICATIONS

Model:	CELmar3-1	Celmar3-2	CELmar4	PD4-5	PD55-5	PD66-6
Frequency Range - [MHz]	156-162.5	156-162.5	146-162.5	156-162.5	156-162.5	156-162.5
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	3/6	3/6	0/3	3/6	4.5/9	4.5/9
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Connector Termination	6 m/22 ft. RG58C/U	18 m/60 ft. RG58C/U	18 m/60 ft. RG58C/U	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U
Power Rating [watt]	100	100	100	100	100	100
Impedance - [Ω]	50	50	50	50	50	50
DC-shortcd	Yes	Yes	Yes	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	CELmar3-1	Celmar3-2	CELmar4	PD4-5	PD55-5	PD66-6
Length - [m/ft.]	2.7/8.9	2.7/8.9	1.26/4.1	2.8/9.2	5.8/19.0	7.2/23.6
Weight - [kg/lbs.]	0.82/1.8	1.4/3.1	1.25/2.8	1.26/2.8	2.5/5.5	2.8/6.1
Mounting Supplied	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule

156–162.5/825–960 MHz · VHF/Cellular

GENERAL DESCRIPTION

CELTwin1 and CELTwin2

A dual band antenna where only one antenna covers 2 frequency bands: marine VHF & Cellular by means of the filters K643F. Especially useful when limited space is a requirement.

The CELTwin antennas are for GSM & CDMA applications.

CELTwin SELECTION

Model:	Mount	Filter
CELTwin	1"–14 TPI Thread	K643F
CELTwin1	N162F	K643F
CELTwin1-2	1"–14 TPI Thread	–
CELTwin1-3	N240F	K643F
CELTwin2	1"–14 TPI Ferrule	K643F



ELECTRICAL SPECIFICATIONS

Model:	CELTwin1	CELTwin2
Frequency Range - [MHz]	156-162.5/870-960	156-162.5/825-890
VSWR VHF	< 1.5:1	< 1.5:1
VSWR Cellular	< 2:1	< 2:1
Gain - [dBd/Marine dB]	0/3	0/3
Polarization	Vertical	Vertical
Connector Termination	N-Female	6 m/18ft. RG58/U Cable
Power Rating [watt]	25	25
Impedance - [Ω]	50	50
DC-shortcd	No	No

MECHANICAL SPECIFICATIONS

Model:	CELTwin1	CELTwin2
Length - [m/ft.]	1.1/3.6	2.5/8.2
Weight - [kg/lbs.]	0.9/1.9	0.75/1.6
Mounting Supplied	See selection table above	

ELECTRICAL SPECIFICATIONS

Model:	K643F
Insertion Loss	< 0.25
Isolation - [dBd]	50
Connector Type	3 x FME-Male
Power - [watts]	25

MECHANICAL SPECIFICATIONS

Model:	K643F
Dimensions (mm)	22x45x80
Weight - [kg/lbs.]	0.06/0.13
Mounting Supplied	Adhesive



160–164 MHz · AIS

GENERAL DESCRIPTION

Antennas designed for the maritime Automatic Identification System (AIS). The antennas are optimized for frequency band 160-164 MHz.

CELmar0-1AIS

Stainless steel sailboat antenna, suitable for rail or mast mounting.

CELmar1-1AIS

High quality fiberglass antenna, suitable for rail or mast mounting.

CX4AIS

The 0 dBd high quality fiberglass antenna suitable for all types of vessels. Selected 1"–14 TPI mount to be ordered separately.

CX3 5/8AIS

The 3 dBd high quality fiberglass antenna suitable for high performance power boats, fishing and commercial use even in high sea. Upper support N200F is required for this configuration. N200F and selected 1"–14 TPI mount to be ordered separately.



ELECTRICAL SPECIFICATIONS

Model:	CELmar0-1AIS	CELmar1-1AIS	CX4AIS	CX3 5/8AIS
Frequency range – [MHz]	160-164	160-164	160-164	160-164
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain [dBd/Marine dB]	0/3	0/3	0/3	3/6
Polarization	Vertical	Vertical	Vertical	Vertical
Connector Termination	UHF-Female	UHF-Female	UHF-Female	UHF-Female
Power rating [Watt]	100	100	100	100
Impedance – [Ohm]	50	50	50	50
DC-shortcd	No	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	CELmar0-1AIS	CELmar1-1AIS	CX4AIS	CX3 5/8AIS
Length [m/ft]	0.95/2.9	1.26/4.1	1.26/4.1	2.63/8.7
Weight [kg/lbs.]	0.35/0.8	0.38/0.84	0.5/1.1	0.7/1.6
Mounting supplied	Mast Bracket incl. N163F	5/8" 24 TPI	1"–14 TPI and N240F	1"–14 TPI and N240F



156–162.5/1575.5 MHz · GPS · VHF/GPS

GENERAL DESCRIPTION

GPS

The GPS marine antenna is for the frequency 1575.42 MHz and easy to install. The antenna can be installed directly on the deck - no problem to walk on the antenna - or on a rail mount or any of the 1" – 14 TPI standard marine mounts (together with adaptor N225F).

Adaptor cables are available for the different GPS receivers with FME connector to fit the GPS and the necessary connector for the manufacturer equipment on board such as SMA, SMB, MCX, MMCX, TNC, BNC, or others.

VHF/GPS

The VHF/GPS marine antenna is for the frequencies 156-162.5 and 1575.42MHz. The GPS antenna is a helix type installed in the top of the antenna. The GPS has a built-in LNA. K650F filter is included.

The GPS antenna has the AC Antennas rugged design and quality. It can be used with the standard AC Marine mounts.

VHF/GPS includes 2 sets cables:
1m with FME and UHF and 0.5m with FME and N.

VHF/GPS-2 includes 2 sets of cables:
1m with FME and TNC and 1m with FME and BNC.

The VHF/GPS antenna also comes with other cable versions. Please see price list or contact us.



ELECTRICAL SPECIFICATIONS

Model:	GPS	VHF/GPS
Frequency Range - [MHz]	1575.42	156-162.5/1575.42
Supply Voltage [VDC]:	3.0-5.5	3.0-5.0
Power Rating VHF [Watt]:	–	35W
VSWR	< 2:1	< 2:1
Gain - [dB]	26	0/18
Impedance - [Ω]	50	50

MECHANICAL SPECIFICATIONS

Model:	GPS	VHF/GPS
Length [m/ft]	0.047xØ 0.05 / 0.15xØ0.16	1.1/3.6
Weight - [kg/lbs]	0.06/0.16	0.65/1.43
Connector FME	FME-Male	N-Female

ELECTRICAL SPECIFICATIONS

Model:	K650F
Insertion Loss VHF [dB]:	< 1.0, typ 0.8 dB
Insertion Loss GPS [dB]:	< 3.0, typ 2.4 dB
Isolation of GPS in VHF path [dB]:	> 18 dB
Isolation of VHF in GPS path [dB]:	> 60 dB
Power Rating VHF [Watt]:	25
Power Common Connector [VDC]:	3-5.5VDC in
Power GPS connector [VDC] :	2.5VDC out

MECHANICAL SPECIFICATIONS

Model:	K650F
Connector type:	3 x FME-Male
Dimensions [mm]:	80 x 45 x 22
Weight - [kg/lbs.]	0.06
Mounting Supplied	Adheasive



1.4–30 MHz · 500W · 5m/16'

GENERAL DESCRIPTION

The KUM480 (4.8m /16') antennas are suited for HF/SSB antenna systems with Automatic Tuner Units. The antennas balance length with performances. The antennas are designed to perform in the most demanding environments.

Mast mounted antennas

KUM480 is designed for mast mounting, which requires two clamps per antenna. AC Antennas clamp options are: N070F, N075F, N080F, N085F and N090F. Mounts are to be ordered separately.

Thread mounted antennas

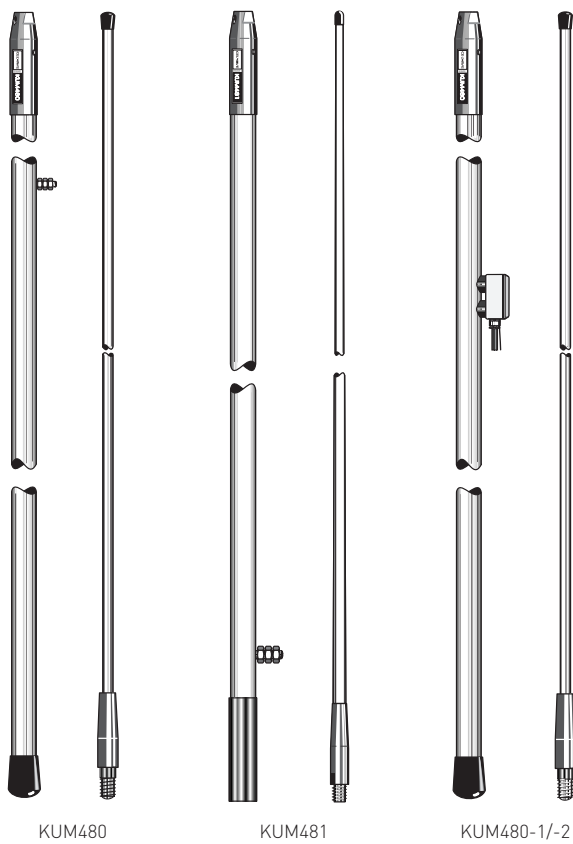
KUM481 is designed for thread mounting using standard AC Antennas 1"-14 TPI mounts. Upper support N200F is required for this configuration. N200F and selected 1"-14 TPI mount are to be ordered separately.

Coaxial connection

KUM48X-1 includes connection box K483F which is used to connect coaxial cables for both transmission and reception applications (1.4MHz – 30 MHz).

KUM48X-2 includes connection box K493F which is used to connect coaxial cables for reception applications only (0.15 – 30 MHz).

The connection boxes can also be ordered separately:
K483F: Transmission and reception (1.4MHz – 30 MHz).
K493F: Reception only (0.15 – 30 MHz).



ELECTRICAL SPECIFICATIONS

Model:	KUM480	KUM481
Frequency Range - [MHz]	1.4-30	1.4-30
Polarization	Vertical	Vertical
Insulation Resistance	> 10 E9	> 10 E9
Power Rating [watt]	500	500
Static Capacity - [pF]	55	55
Maximum HF Voltage - [kV]	9	9

MECHANICAL SPECIFICATIONS

Model:	KUM480	KUM481
Length - [m/ft.]	4.8/15.7	4.8/15.7
Weight - [kg/lbs.]	2/4.4	2.2/4.9
Windload at 160 km/h - [N]	99	99
Sections	2	2
Mounting Supplied	Option see page 40	Option see page 39
Color	White	White

1.4–30 MHz · 750W · 6m/20'

GENERAL DESCRIPTION

The KUM600 (6m /19.7') antennas are suited for HF/SSB antenna systems with Automatic Tuner Units. The antennas are designed to perform in the most demanding environments.

Mast mounted antennas

KUM600 and KUM603 are designed for mast mounting, which requires two clamps per antenna. AC Antennas clamp options are: N070F, N075F, N080F, N085F and N090F. Mounts are to be ordered separately.

Thread mounted antennas

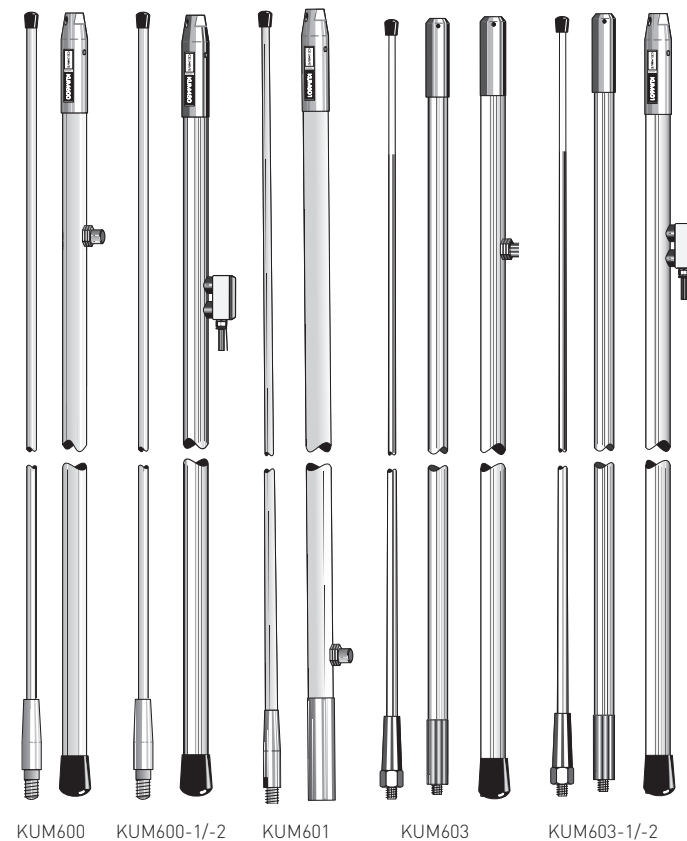
KUM601 is designed for thread mounting using standard AC Antennas 1"–14 TPI mounts. Upper support N200F is required for this configuration. N200F and selected 1"–14 TPI mount to be ordered separately.

Coaxial connection

KUM60X-1 includes connection box K483F which is used to connect coaxial cables for both transmission and reception applications (1.4MHz – 30 MHz).

KUM60X-2 includes connection box K493F which is used to connect coaxial cables for reception applications only (0.15 – 30 MHz).

The connection boxes can also be ordered separately:
K483F: Transmission and reception (1.4MHz – 30 MHz).
K493F: Reception only (0.15 – 30 MHz).



ELECTRICAL SPECIFICATIONS

Model:	KUM600	KUM601	KUM603
Frequency Range - [MHz]	1.4-30	1.4-30	1.4-30
Polarization	Vertical	Vertical	Vertical
Power Rating [watt]	750	750	750
Insulation Resistance	> 10	> 10	> 10 E9
Static Capacity - [pF]	70	70	70
Maximum HF Voltage - [kV]	9	9	9

MECHANICAL SPECIFICATIONS

Model:	KUM600	KUM601	KUM603
Length - [m/ft.]	6/19.7	6/19.7	6/19.7
Weight - [kg/lbs.]	2.5/5.6	2.7/6	2.5/5.6
Windload at 160 km/h - [N]	150	150	150
Sections	2	2	3
Mounting Supplied	Option see page 40	Option see page 39	Option see page 40
Color	White	White	White

1.4–30 MHz · 1000W · 7m/23'

GENERAL DESCRIPTION

The KUM700 (7m /23') antennas are suited for HF/SSB antenna systems with Automatic Tuner Units. The antennas are designed to perform in the most demanding environments.

Mast mounted antennas

KUM700 and KUM703 are designed for mast mounting, which requires two clamps per antenna. AC Antennas clamp options are: N070F, N075F, N080F, N085F and N090F. Mounts are to be ordered separately.

Thread mounted antennas

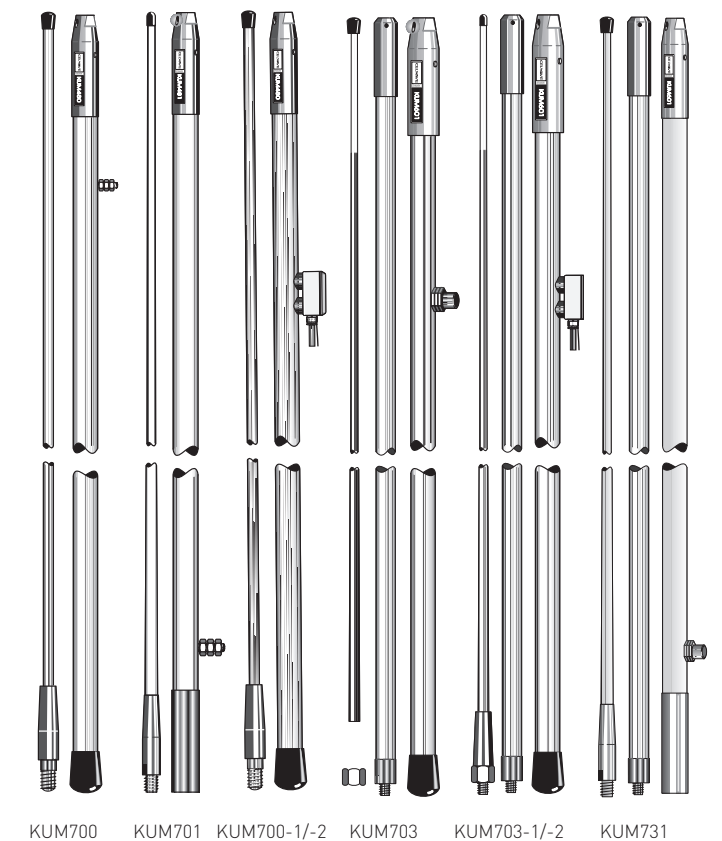
KUM701 and KUM731 are designed for thread mounting using standard AC Antennas 1"–14 TPI mounts. Upper support N200F is required for this configuration. N200F and selected 1"–14 TPI mount to be ordered separately.

Coaxial connection

KUM70X-1 includes connection box K483F which is used to connect coaxial cables for both transmission and reception applications (1.4MHz – 30 MHz).

KUM70X-2 includes connection box K493F which is used to connect coaxial cables for reception applications only (0.15 – 30 MHz).

The connection boxes can also be ordered separately:
K483F: Transmission and reception (1.4MHz – 30 MHz).
K493F: Reception only (0.15 – 30 MHz).



ELECTRICAL SPECIFICATIONS

Model:	KUM700	KUM701	KUM703	KUM731
Frequency Range - [MHz]	1.4-30	1.4-30	1.4-30	1.4-30
Polarization	Vertical	Vertical	Vertical	Vertical
Power Rating [watt]	1000	1000	1000	1000
Insulation Resistance	> 10 E9	> 10 E9	> 10 E9	> 10 E9
Static Capacity - [pF]	80	80	80	80
Maximum HF Voltage - [kV]	9	9	9	9

MECHANICAL SPECIFICATIONS

Model:	KUM700	KUM701	KUM703	KUM731
Length - [m/ft.]	7/23	6.7/22	7/23	6.8/22.3
Weight - [kg/lbs.]	3/6.6	3/6.6	3.2/7	3/6.7
Windload at 160 km/h - [N]	161	161	161	161
Sections	2	2	3	3
Mounting Supplied	Option see page 40	Option see page 39	Option see page 40	Option see page 39
Color	White	White	White	White

1.4–30 MHz · 1200W · 8m/26'

GENERAL DESCRIPTION

The KUM800 (8m /26') antennas are suited for HF/SSB antenna systems with Automatic Tuner Units. The antennas are designed to perform in the most demanding environments.

Mast mounted antennas

KUM850 and KUM803 are designed for mast mounting, which requires two clamps per antenna. AC Antennas clamp options are: N100F, N110F, and N115F. Mounts are to be ordered separately.

Deck mounted antennas

KUM803DM is designed for self-supporting deck mount. The deck mount has a white lacquer layer ensuring low visual impact and a superior environmental protection of the material.

Coaxial connection

KUM8XX-1 includes connection box K487F which is used to connect coaxial cables for both transmission and reception applications (1.4MHz – 30 MHz).

KUM8XX-2 includes connection box K537F which is used to connect coaxial cables for reception applications only (0.15 – 30 MHz).

The connection boxes can also be ordered separately:
K487F: Transmission and reception (1.4MHz – 30 MHz).
K537F: Reception only (0.15 – 30 MHz).



ELECTRICAL SPECIFICATIONS

Model:	KUM850	KUM803	KUM803DM
Frequency Range - [MHz]	1.4-30	1.4-30	1.4-30
Polarization	Vertical	Vertical	Vertical
Power Rating [watt]	1200	1200	1200
Insulation Resistance	> 10 E9	> 10 E9	> 10 E9
Static Capacity - [pF]	100	100	100
Maximum HF Voltage - [kV]	18	18	18

MECHANICAL SPECIFICATIONS

Model:	KUM850	KUM803	KUM803DM
Length - [m/ft.]	8.2/27	8/26	8/26
Weight - [kg/lbs.]	7/15.5	6.3/13.9	8.3/18.3
Windload at 160 km/h - [N]	327	327	327
Section	2	3	3
Mounting Supplied	Option See Page 40	Option See Page 40	Deckmount
Color	White	White	White

1.4–30 MHz · 1200W · 9m/30'

GENERAL DESCRIPTION

The KUM900 (9m /30') antennas are suited for HF/SSB antenna systems with Automatic Tuner Units. The antennas are designed to perform in the most demanding environments.

Mast mounted antennas

KUM950 and KUM903 are designed for mast mounting, which requires two clamps per antenna. AC Antennas clamp options are: N100F, N110F, and N115F. Mounts are to be ordered separately.

Deck mounted antennas

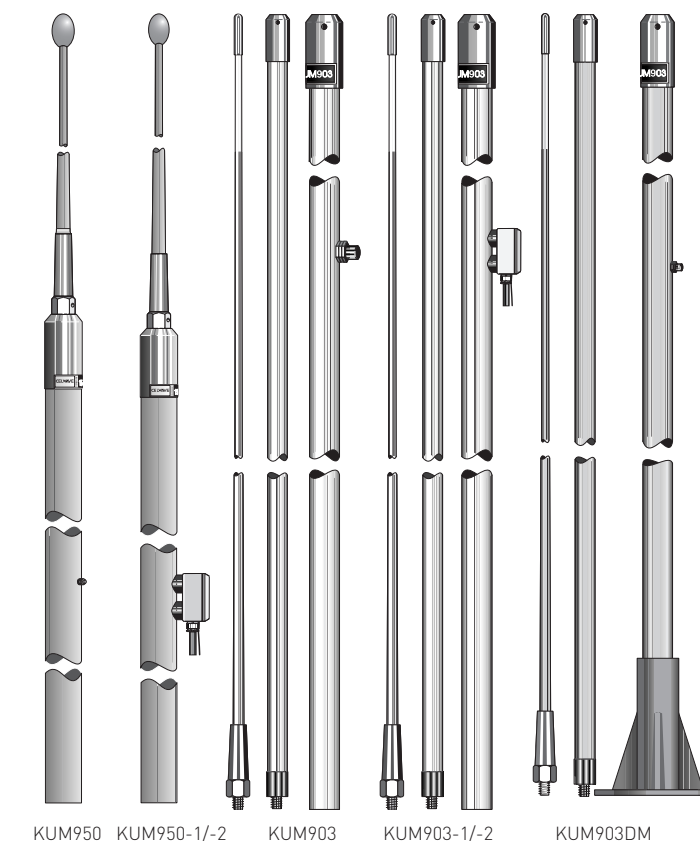
KUM903DM is designed for self-supporting deck mount. The deck mount has a white lacquer layer ensuring low visual impact and a superior environmental protection of the material.

Coaxial connection

KUM9XX-1 includes connection box K487F which is used to connect coaxial cables for both transmission and reception applications (1.4MHz – 30 MHz).

KUM9XX-2 includes connection box K537F which is used to connect coaxial cables for reception applications only (0.15 – 30 MHz).

The connection boxes can also be ordered separately:
K487F: Transmission and reception (1.4MHz – 30 MHz).
K537F: Reception only (0.15 – 30 MHz).



ELECTRICAL SPECIFICATIONS

Model:	KUM950	KUM903	KUM903DM
Frequency Range - [MHz]	1.4-30	1.4-30	1.4-30
Polarization	Vertical	Vertical	Vertical
Power Rating [watt]	1200	1200	1200
Insulation Resistance	> 10 E9	> 10 E9	> 10 E9
Static Capacity - [pF]	100	100	100
Maximum HF Voltage - [kV]	18	18	18

MECHANICAL SPECIFICATIONS

Model:	KUM950	KUM903	KUM903DM
Length - [m/ft.]	9.2/30	9.05/29.7	9.05/29.7
Weight - [kg/lbs.]	7.5/16.6	8.6/19	9.6/21.2
Windload at 160 km/h - [N]	347	347	347
Section	2	3	3
Mounting Supplied	Option See Page 40	Option See Page 40	Deckmount
Color	White	White	White



380–470 MHz · UHF 450 · UHF/VHF

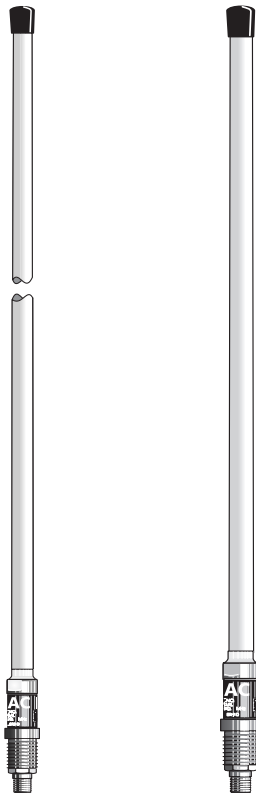
GENERAL DESCRIPTION

CXU1, CXU3 and CXU4

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

Ruggedly designed to operate in all weather conditions.

Please see below table mechanical specification for the different frequency ranges and mounting hardware.



CXU1/CXU3/CXU4

UHF/VHF

ELECTRICAL SPECIFICATIONS

Model:	CXU1	CXU3	CXU4	UHF/VHF
Frequency Range - [MHz]	380-470*	380-470*	380-470*	156-162.5 / 420-440
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	0/3	3/6	5/10	0/3 / 0/3
Polarization	Vertical	Vertical	Vertical	Vertical
Connector Termination	N-Female	N-Female	N-Female	N-Female
Power Rating [watt]	100	100	250	25/25
Impedance - [Ω]	50	50	50	50
DC-shortcd	Yes	Yes	Yes	No

MECHANICAL SPECIFICATIONS

Model:	CXU1	CXU3	CXU4	UHF/VHF
Length - [m/ft.]	0.85/2.8	1.35/4.4	2.2/7.2	1.3/3.7
Weight - [kg/lbs.]	0.5/1.1	0.7/1.5	0.8/1.76	0.7/1.54

DIFFERENT TYPES

Type:	Frequency [MHz]	Mounting Supplied
CXU1	450-470	N240F
CXU1-2	450-470	–
CXU1-5	380-400	N240F
CXU1-8	430-470	–
CXU3	450-470	N240F
CXU3-1	430-450	N240F
CXU3-2	410-430	–
CXU3-4	450-470	–
CXU3-5	380-400	N240F
CXU3-10	440-460	–
CXU4	440-470	N240F
CXU4-1	420-450	N240F
CXU4-2	405-430	N240F
CXU4-3	380-405	N240F

Option: Upon order of large quantities we can tailor make the antenna to a specific center frequency.



806–890 MHz · Cellular

GENERAL DESCRIPTION

CELsea1, CELsea1A, CELsea3, CELsea3A and CELsea3S

The CELsea antennas are designed for the GSM850 2-way radio telephone system onboard the vessel.

The CELsea series of marine antennas for cellular applications are ruggedly designed to perform in the most demanding environments.

All models feature copper and copper alloy internal construction.

For installation on 1"–14 TPI mounting hardware.



ELECTRICAL SPECIFICATIONS

Model:	CELsea1	CELsea1A	CELsea3	CELsea3A	CELsea3S
Frequency Range - [MHz]	825-890	806-866	825-890	806-866	825-890
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	0/3	0/3	3/6	3/6	3/6
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical
Connector Termination	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U	6 m/20 ft. RG58C/U
Power Rating [watt]	100	100	100	100	100
Impedance - [Ω]	50	50	50	50	50
DC-shortcd	Yes	Yes	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	CELsea1	CELsea1A	CELsea3	CELsea3A	CELsea3S
Length - [m/ft.]	0.65/2.1	0.65/2.1	2.65/8.7	2.65/8.7	1.2/3.8
Weight - [kg/lbs.]	0.34/0.75	0.34/0.75	0.8/1.8	0.8/1.8	0.8/1.8
Mounting Supplied	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule	1"–14 TPI Ferrule

806–890/1850–1990 MHz · Cellular

GENERAL DESCRIPTION

CEL5, CELsea6, CELsea6A, CELsea9, CELsea9A, CELsea9S and CELdual-2

The CELsea antennas and CEL5 antenna are designed for the GSM850 2-way radio telephone system onboard the vessel.

The series of marine antennas for cellular applications are ruggedly designed to perform in the most demanding environments.

All models feature copper and copper alloy internal construction.

CELdual-2

A dual band antenna, where one antenna covers two frequencies: GSM850 and PCS 1900. Ideal for places with limited antenna space or where visual impact is important. The CELdual-2 has the same rugged design as all other AC Antennas antennas.



ELECTRICAL SPECIFICATIONS

Model:	CEL5	CELsea6	CELsea6A	CELsea9	CELsea9A	CELsea9S	CELdual-2
Frequency Range - [MHz]	825-890	825-890	806-866	825-890	806-866	825-890	825-890 / 1850-1990
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain - [dBd/Marine dB]	5/10	0/3	0/3	3/6	3/6	3/6	0/3
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Connector Termination	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
Power Rating [watt]	250	50	50	50	50	50	50
Impedance - [Ω]	50	50	50	50	50	50	50
DC-shorted	Yes	Yes	Yes	Yes	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	CEL5	CELsea6	CELsea6A	CELsea9	CELsea9A	CELsea9S	CELdual-2
Length - [m/ft.]	1.5/4.9	0.45/1.5	0.45/1.5	2.65/8.7	2.65/8.7	1.1/3.6	0.45/1.5
Weight - [kg/lbs.]	0.7/1.6	0.34/0.75	0.3/0.66	0.6/1.3	0.6/1.3	0.6/1.3	0.4/0.88
Mounting Supplied	1"–14 TPI	1"–14 TPI	1"–14 TPI	1"–14 TPI	1"–14 TPI	1"–14 TPI	N240F

890–960/1710–2170 MHz · Cellular

GENERAL DESCRIPTION

CEL1B, CEL3B and CEL5B

The CELxB antennas are designed for GSM900 2-way telephone system onboard the vessel.

The CEL series of marine antennas for cellular GSM900 applications are ruggedly designed to perform in the most demanding environments.

All models feature copper and copper alloy internal construction.

CELdual

A dual band antenna, where one antenna covers two frequencies: GSM and DCS. Ideal for places with limited antenna spaces or where visual impact is important. The CELdual has the same rugged design as all other AC Antennas antennas.

GSM/UMTS

A dualband antenna covering two frequencies: GSM and UMTS. Ideal for places with limited antenna space or where visual impact is important.



ELECTRICAL SPECIFICATIONS

Model:	CEL1B	CEL3B	CEL5B	CELdual	GSM/UMTS
Frequency Range - [MHz]	890-960	890-960	890-960	890-960 / 1710-1880	890-960 / 1920-2170
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 2:1 / < 2.5:1
Gain - [dBd/marine dB]	0/3	3/6	5/10	0/3	0/3
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical
Connector Termination	N-Female	N-Female	N-Female	N-Female	N-Female
Power Rating [watt]	100	100	250	20/10	20/10
DC-shorted	Yes	Yes	Yes	Yes	Yes

MECHANICAL SPECIFICATIONS

Model:	CEL1B	CEL3B	CEL5B	CELdual	GSM/UMTS
Length - [m/ft.]	0.44/1.44	1.1/3.6	1.5/4.9	0.44/1.44	0.44/1.44
Weight - [kg/lbs.]	0.4/0.9	0.65/1.45	0.75/1.7	0.4/0.9	0.4/0.9
Mounting Supplied	N240F	N240F	N240F	N240F	N240F



0.1–30 MHz · Receiving · CB

GENERAL DESCRIPTION

BB1

The BB1 is an active Broadband antenna covering 100 kHz to 30 MHz. The BB1 is only 32 cm and easy to install using the standard AC Antennas mounting hardware.

NAVTEX3

The NAVTEX3 is an active receiving antenna specially designed for the NAVTEX receivers using 490kHz, 518kHz and 4,209.5kHz. The NAVTEX3 is only 32cm and easy to install using the standard AC Antennas mounting hardware.

Loran/DGPS-2

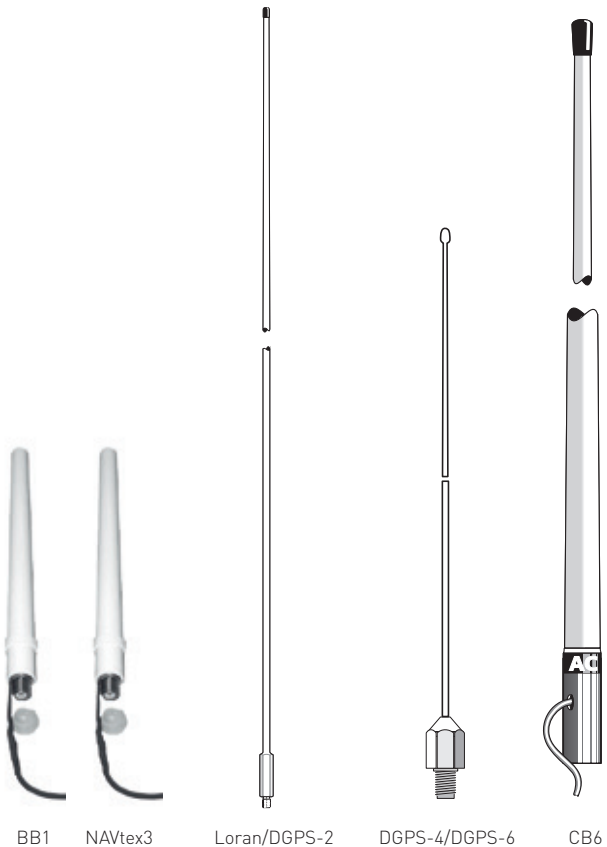
A 2,0 m (6.6”) or 1.2 m (4”) fibreglass whip antenna with 3/8” - 24 TPI for use with any Loran receiver or DGPS receiver.

DGPS-4/DGPS-6

A 1.2 m (4”) or 0.6 m (2”) stainless steel whip antenna with 3/8”-24 TPI for use with any Loran receiver or DGPS receiver.

CB6

The CB marine antenna is for the Citizen Band (CB) - 27 MHz. The CB6 is designed to match the physical appearance of CELmar3-1 VHF antenna.



ELECTRICAL SPECIFICATIONS

Model:	BB1	NAVTEX3	LORAN	DGPS-2	DGPS-4	DGPS-6	CB6
Frequency Range (MHz)	0.1-30	0.49/0.518/4,209.5	0.09-0.11	0.09-0.11	0.09-0.11	0.09-0.11	26.8-28
Connector Termination	UHF-Female	UHF-Female	3/8”-24 TPI	3/8”-24 TPI	3/8”-24 TPI	3/8”-24 TPI	6 m/20 ft. RG58C/U
Supply Voltage [VDC]	8-10, max 12	9-12	-	-	-	-	-
Supply Current (mA)	30	10	-	-	-	-	-
Power Rating [Watt]	-	-	-	-	-	100	50
Impedance - [Ω]	50	50	50	50	50	50	50
VSWR	-	-	-	-	-	-	< 1.5:1
Gain - [dBd/Marine dB]	-	-	-	-	-	-	3/6
Polarization	-	-	-	-	-	-	Vertical

MECHANICAL SPECIFICATIONS

Model:	BB1	NAVTEX3	LORAN	DGPS-2	DGPS-4	DGPS-6	CB6
Length - [m/ft.]	0.32/1.05	0.32/1.05	2.0/6.6	1.2/4	1.2/4	0.6/2	2.7/8.9
Weight - [kg/lbs.]	0.20/0.45	0.15/0.33	0.36/1.3	0.2/0.7	0.2/0.7	0.1/0.35	0.8/1.8
Mounting Supplied	N240F	N240F	3/8”-24TPI	3/8”-24TPI	3/8”-24TPI	3/8”-24TPI	1”-14 TPI Ferrule



87.5–790 MHz · Terrestrial FM/TV

GENERAL DESCRIPTION

UF02

UF02 is the smallest omnidirectional antenna on the market with integrated amplifier. The streamlined design ensures minimum wind resistance. The low weight does not affect the sailing qualities of the boat. The capsule shape of the UF02 protects ropes and sails from getting caught. At the same time the antenna is so unobstrusive that it fits every type of boats. UF02 receives both analogue and digital signals. Optimized for DVB-T, reception of FM/DAB/BIII/UHF signals and suppression of LTE signals above 790 Mhz. The UF02 is manufactured in quality materials in order to prevent galvanic corrosion.

UF02 fits standard 1"–14 TPI mounting hardware.

Power supply for UF02 antennas to be ordered separately.

N262F: 2-way Power Splitter/Power Supply,
12-24 VDC in 5 VDC out, 100mA



UF02

ELECTRICAL SPECIFICATIONS

Model:	UF02
Frequency Range - [MHz]	87.5-108/174-300/470-790
Nominal impedance - [Ω]	75
Gain, with Amplifier - [dB]	28
Max Output Voltage at 66 dB IMA - [dBmV]	108/104
Noise Figure - [dB]	< 3
Supply voltage [VDC]	5-24
Current consumption [mA]	50
Polarization	Horizontal
Connector	Female
DC-shortcd	No
Power Supply Unit Type - optional	N262F

MECHANICAL SPECIFICATIONS

Model:	UF02
Dimensions - [m/ft]	0.065xØ0.255/0.23xØ0.84
Weight - [kg/lbs]	0.4/0.9
Wind load [N]	5.5
Mounting Supplied	Mast Bracket
Material	PVC
Colour	White
Coaxial Cable Recommended	Good Quality 75 Ω



0.15–30/88–108 MHz · AM/FM

GENERAL DESCRIPTION

FAME1

0 dBd omnidirectional receiving antenna with excellent AC Antennas finishing and quality. The FAME1 matches the CX4 VHF antenna in length and appearance.

FAME2

0 dBd omnidirectional receiving antenna with excellent AC Antennas finishing and quality. The FAME2 equals electrically the FAME1 antenna but it is equipped with a 1"–14 TPI chrome ferrule and 18m (60 ft) RG58C/U cable.

FAME3

3 dBd omnidirectional receiving antenna with excellent AC Antennas finishing and quality. The FAME3 matches the CX3 5/8 VHF antenna in length and appearance.

FAME4

0 dBd omnidirectional receiving antenna with excellent AC Antennas finishing and quality. The FAME4 equals electrically the FAME3 antenna but it is equipped with a 1"–14 TPI chrome ferrule and 18m (60 ft) RG58C/U cable.

The FAME antennas have premium quality in performance as well as in materials used. Designed for usage in harsh environments and withstand icing, salt mist and acid rain.



ELECTRICAL SPECIFICATIONS

Model:	FAME1	FAME2	FAME3	FAME4
Frequency range – [MHz]	0.15-30/88-108	0.15-30/88-108	0.15-30/88-108	0.15-30/88-108
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Gain [dBd/Marine dB]	0/3	0/3	3/6	3/6
Polarization	Vertical	Vertical	Vertical	Vertical
Connector Termination	UHF-Female	18m/60 ft RG58C/U	UHF-Female	18m/60 ft RG58C/U
Impedance	75	75	75	75
DC-shorted	No	No	No	No

MECHANICAL SPECIFICATIONS

Model:	FAME1	FAME2	FAME3	FAME4
Length – [m/ft.]	1.26/4.2	1.27/4.2	2.68/8.8	2.68/8.8
Weight – [kg/lbs]	0.44/1.0	1.65/3.6	0.67/1.5	1.4/3.0
Mounting supplied	N240F	1"–14 TPI Ferrule	N240F	1"–14 TPI Ferrule
Color	White	White	White	White

Accessories & Mounting

GENERAL DESCRIPTION

H030F: Stand-off for MF and HF. Material: Delrin.

H040F: Feed through for wire antennas.
Material: Delrin.

K483F: Connection box for KUM48X, KUM6XX and KUM7XX which is used to connect coaxial cables for both transmission and reception applications. (1.4MHz – 30 MHz)

K487F: Connection box for KUM8XX and KUM9XX which is used to connect coaxial cables for both transmission and reception applications. (1.4MHz – 30 MHz)

K493F: Connection box for KUM48X, KUM6XX and KUM7XX which is used to connect coaxial cables for reception applications. (0.15MHz – 30 MHz)

K537F: Connection box for KUM8XX and KUM9XX which is used to connect coaxial cables for reception applications. (0.15MHz – 30 MHz)

N200F: Adjustable upper support. Provides up to 90 mm (3½") of horizontal stand-off adjustment from the bulkhead surface.

N240F: Mounting nut for 1 1/4"–11 TPI. With O-ring and rubber cover. Material: Chrome brass and rubber.

N262F: 2-way Power Splitter/Power Supply, 12-24 VDC in, 5 VDC out, 100mA.

N267F: Power Supply for BB1 and NAVTEX3 antennas. 24 VDC in, 12 VDC out.

N294F: Adaptor for 1"–14 TPI antennas. Outside 1"–14 TPI and inside 1 1/4"–11 TPI.



H040F



H030F

Connection Box
K483F/K487F/K493F/K537F

N200F



N240F



N294F



N262F



N267F

Accessories & Mounting

GENERAL DESCRIPTION

H001F: Coaxial cable feed through for RG213 cable.
Material: Chrome brass.

H010F: Coaxial cable feed through for RG58 cable.
Material: Chrome brass.

H012F: Deck cable feed through. For RG58C/U and RG213 Material: Nylon

N210F: Rail mount for GPS & CEL16 for 22-30mm.
Material: Nylon.

N225F: Adaptor for GPS Antenna - to be used with 1"-14 TPI mounts. Material: Nylon

N249F: Rail mount for GPS and CEL16. 1"-14 TPI.
Material: Nylon

N251F: Rail mount with allen key and stainless steel mounting ring. 1"-14 TPI. For 1" or 7/8" rail.
Material: Nylon and stainless steel.

N253F: Rail mount with knob. 1"-14 TPI. For 1" or 7/8" rail. Material: Nylon,

N254F: Rail mount with handle. 1"-14 TPI. For 1" or 7/8" rail. Material: Nylon.

N255F: Deck mount for GPS and CEL16 antennas. 1"-14 TPI. Material: Nylon.

N280F: Adaptor with cable side-fed, outside 1 1/4"-11 TPI and inside 1"-14 TPI. Incl. 6m (20 ft.) RG58C/U cable and UHF-Male connector. Hole for side fed cable. Material: Chrome Brass.

N280-02F: 6m (20 ft.) RG58C/U cable and UHF-Male connector.

N281F: Adaptor with cable side-fed, outside 1 1/4"-11 TPI and inside 1"-14 TPI. Incl. 6m (20 ft.) RG58C/U cable with UHF-Male and N-male.
Material: Chrome Brass.

N282F: Adaptor with cable side-fed, inside 1"-14 TPI, outside 1 1/4"-11 TPI. Material: PVC.

N290F: 4-way mount. For deck or bulkhead mounting. 1"-14 TPI. Material Nylon.

NOTE: Different types of connectors and cable sets are available - see pricelist or contact AC Antennas.



Accessories & Mounting

GENERAL DESCRIPTION

E179F: Deck mount permits the coax cable to be installed directly through the deck eliminating the need for additional cable feed through.
1 1/4" - 11 TPI pipe thread. Material: Chrome brass.

E180F: Deck mount permits the coax cable to be installed directly through the deck eliminating the need for additional cable feed through.
1 1/4" - 11 TPI pipe thread. Material: Stainless steel.

N157F: Universal mount for support pipe Ø20-26mm (0.8"-1.1"). Material: Stainless steel.

N158F: Versatile universal mount for support pipe Ø20-26mm (0.8"-1.1"). Includes bolt for fixation of antennas with 1" - 14 TPI female ferrule. Material: Stainless steel.

N159F/N170F/N171F: Angle bracket for mast mount.
N159F: U-clamp set with washers and nuts.
N170F: Angle bracket with 1"-14 TPI nut/washer set.
N171F: Angle bracket with U-clamp set.
Max Ø60mm pipe. Material: Stainless steel.

N162F: Mast bracket with Ø5/8" and Ø1" holes for all types of antennas, incl. mounting nut/washer for antennas with 1"-14 TPI mounting (CX4, CEL3B, etc). Material: Stainless steel.

N163F: Mast bracket with Ø5/8" and Ø1" holes for all types of antennas, excl. mounting nut/washer, e.g. CEL-mar0 and CELmar1 antennas. Material: Stainless steel.

N164F: Mast mount. 1"-14 TPI. Material: Stainless steel and brass.

N220F: Mast Mount for 1"-14 TPI incl. mounting hardware. Max Ø48mm pipe. Material: Stainless steel.

N270F: Heavy duty mast/wall bracket of superior quality for 1 1/4"-11 TPI. Overhead mounting on mast tube Ø38-75 mm. Side mounting on vertical or horizontal mast tube Ø30-75 mm. Wall mount.
Material: Solid brass.

N275F: Universal mast mount for mounting on top of any support pipe Ø33-40 mm (1 3/8"-1 1/2") in diameter. This mount also accommodates side mount up to 58 mm (2 1/4"). Wall mount. Material: Anodized aluminium.

N285F: 4-way mount. For deck or bulkhead mounting. 1"-14 TPI. Material: Chrome brass.

N286F: 4-way mount. For deck or bulkhead mounting. 1"-14 TPI. Material: Stainless steel.

N288F: Deck mount. 1"-14 TPI. Material: Stainless steel.

N298F: Mast Mount for 1 1/4 - 11 TPI incl. mounting hardware. Max Ø48mm pipe. Material: Stainless Steel.



Accessories & Mounting

GENERAL DESCRIPTION

N276F: 30 cm extension mast. 1"-14 TPI. Material: Aluminium.

N280-01F: Adaptor with cable side-fed, double inside 1"-14 TPI. Material: Chrome Brass.

N280-03F: Adaptor with cable side-fed, outside 1 1/4"-11 TPI and inside 1"-14 TPI. Material: Chrome Brass.

N070F/N075F: Side mast mounting clamp for KUM480/600/603/700/703. 30-50 mm (1" - 1.7") Material N070F: Galvanized steel. Material N075F: Stainless steel.

N080F/N085F: Side mast mounting clamp for KUM480/600/603/700/703. 50-80 mm (1.7" - 2.7") Material N080F: Galvanized steel. Material N085F: Stainless steel.

N090F: Side mast mounting clamp for KUM480/600/603/700/703. 80-100 mm (2.7" - 3.3") diameter. Material N090F: Stainless steel.

N100F: Clamp for welding KUM803/850/903/950, 240 mm (8") long and 40 mm (1.3") wide. Material N100F: Stainless steel.

N110F/N115F: Side mast mounting clamp for 50-70 mm (1.7"-2.3") diameter for KUM803/850/903/950. Material N110F: Galvanized steel. Material N115F: Stainless steel.

N245F: Side mounting clamp for 31-60 mm (1 1/4"-2 3/4") diameter rail or mast. Material: Galvanized steel, bolts nuts and washers stainless steel.

H022F: Delrin Insulator, Large - 207 mm.

H023F: Delrin Insulator, Small - 131 mm.



N070F/N075F/N080F/N085F/N090F



N100F



N110F/N115F



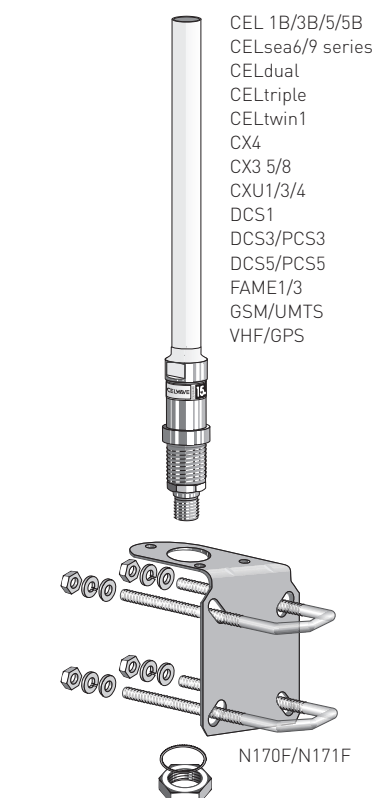
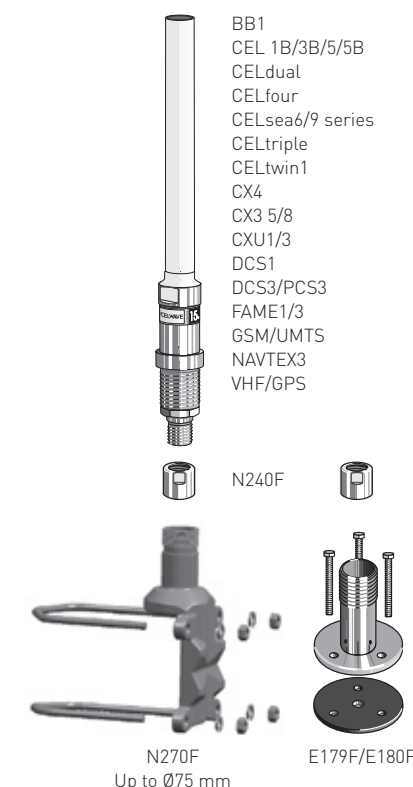
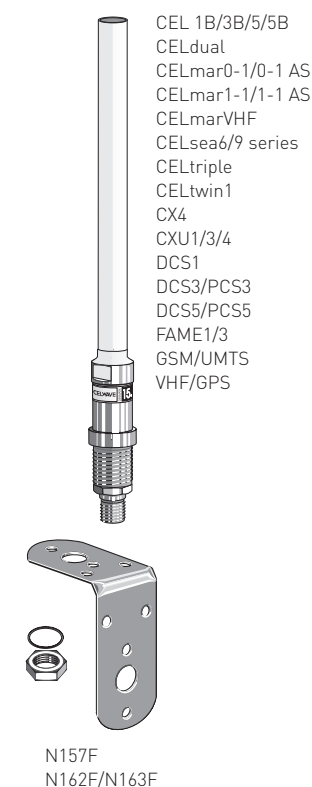
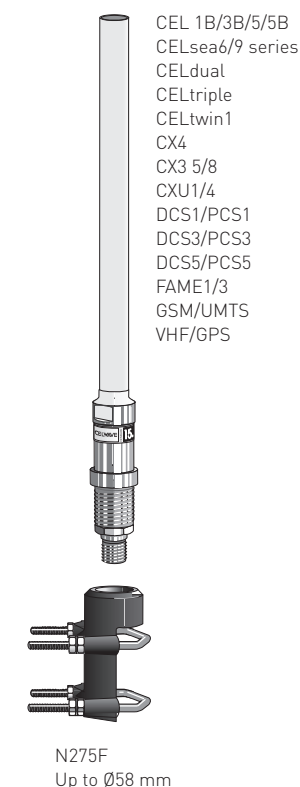
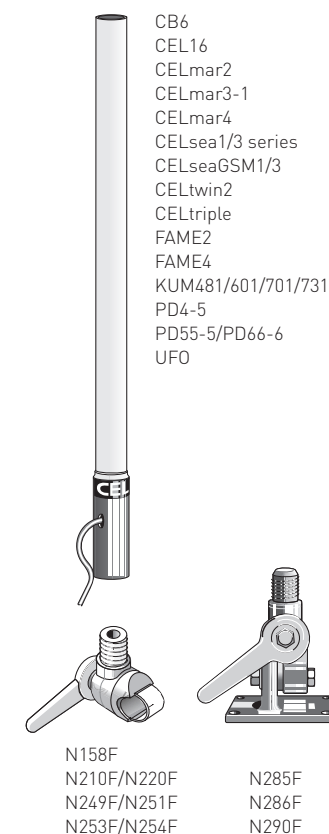
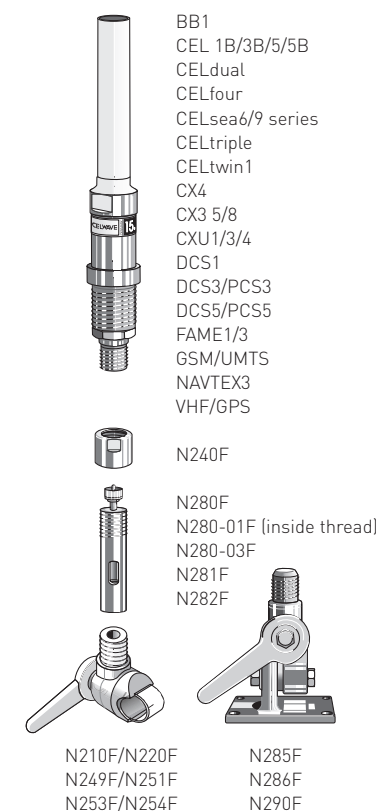
N245F



H022F/H023F

Mounting Hardware

GENERAL DESCRIPTION



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.

Gain = 10 log (ant. / reference ant.)

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:

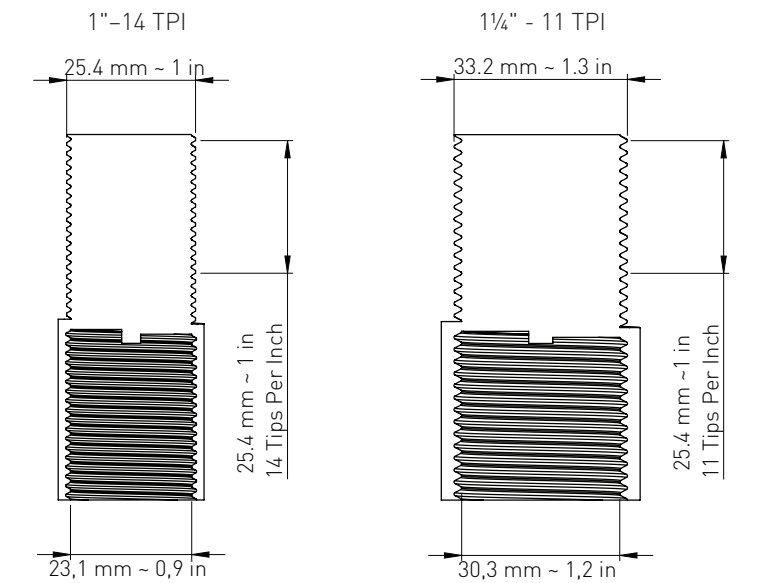
dBd=dBi-2.15

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 Antennas 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



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