

3 dBd colinear Antenna for the Base Station and Maritime VHF Band

DESCRIPTION

- > This antenna is especially developed for the base station and maritime VHF band and it is used when more gain is required than obtainable with standard $\frac{1}{2}$ λ dipoles.
- > The 1" revolving nut mounting system is standard throughout the maritime sector, and several different mounting brackets are available, making it possible to install the antenna either on the masthead, side mounted on the mast or mounted on the crossbeam. Also, the antenna can be mounted on deck or rooftop by means of the FLG. (See accessories).
- > The higher the antenna is mounted, the better coverage. Avoid mounting the antenna parallel with or in the neighbourhood of other metal parts, such as masts, supporting wires etc. The antenna needs no ground-plane, radials nor other auxiliary arrangements.
- > CXL 2-3 is broad-banded, having a good SWR on the RX-frequencies as well as on the TX-frequencies. All metal parts are at ground potential and consequently, the antenna shows a DC-short across the coaxial cable.
- > A conical glass fibre tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.

SPECIFICATIONS

Electrical	
Model	CXL 2-3
Frequency	156 - 162 MHz
Antenna Type	Omnidirectional coaxial collinear
Max. Input Power	150 W
Polarisation	Vertical
3 dB Beamwidth, E- Plane	30 °
3 dB Beamwidth, H- Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandwidth	6 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

Mechanical	
Connection(s)	UHF female
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
Colour	White (RAL 9003)
Wind Area	0.063 sq. m / 0.68 sq. ft
Wind Load	89 N (160km/h)
Dia. At Top End	15 mm / 0.59 in.
Dia. At Bottom End	23 mm / 0.91 in.
Height	2750 mm / 108.27 in.
Weight	1 kg / 2.20 lb
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

Environmental	
Operating Temperature Range	-30°C to +70°C

ORDERING

Туре	Product No.
CXL 2-3	110000130

DIAGRAM

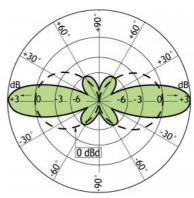
ACCESSORIES (to be ordered separately)

Gain dBd 3.0 2.0 2.0 1.5 1.0 1.0 157 158 156 159 160 161 162 f[MHz]

TYPICAL GAIN AND SWR CURVES

YA-Bracket SWR SMR 2 FLG SMR 1 G1"-11 (1" RG) G1"-11 (1" RG) MariFix 1 MariFix 2 ADT LW-SS-1"

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



