



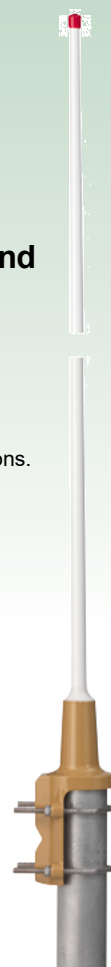
DS038467-2

5/5/2023

Universal, Unity-Gain Base Station and Marine Antenna for 160 MHz Band

Description

- This multi-purpose, omnidirectional, 0 dBd, rod-type base station and marine antenna covers the 160 MHz band (138-175 MHz) in 3 sub-models with 10 MHz overlap and can be used in various applications.
- The broad-banded $\frac{1}{2} \lambda$ dipole antenna element is sealed in a high-quality conical glass fiber tube with low wind-load, which will ensure undisturbed performance by corrosive environments.
- Provided with the sturdy mast mount - a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminum. The accompanying U-bolts and fittings are made of stainless steel.
- To be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter.
- The cable can either be run along the outside or on the inside of the mast tube for more protection.
- The accompanying U-bolts and fittings are made of stainless steel.
- The antenna can be mounted on 27 to 65 mm dia. mast tubes, and it is possible to run the cable either along the outside or on the inside of the mast tube for more protection.
- Large bandwidth with respect to both VSWR and gain.
- The antenna is DC-grounded to substantially reduce noise caused by atmospheric discharges and consequently shows a DC-short across the coaxial cable.
- Vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna.

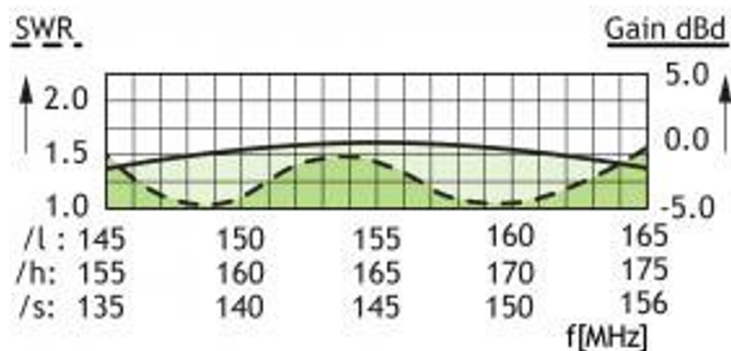


Specifications

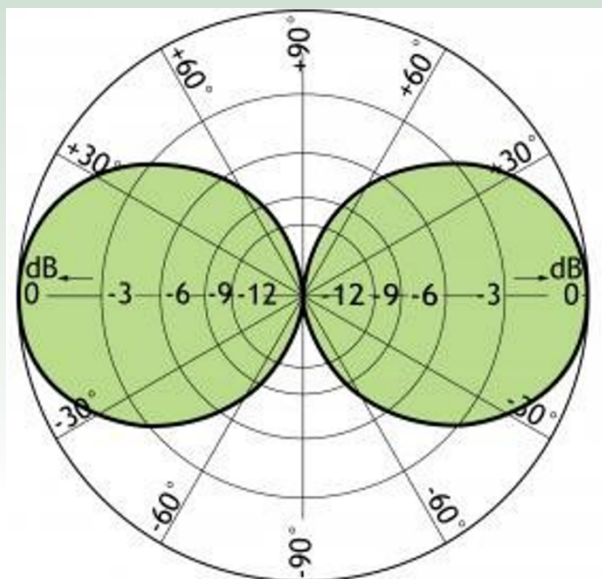
Electrical		
Model	See model ordering information table below	
Antenna Type	Coaxial dipole, broad-banded	
Frequency Range of operation	138 - 175 MHz (see model list below for sub-models)	
Bandwidth	18 - 21 MHz (depending on model)	
Max. Input Power	150 W	
Polarization	Vertical	
3 dB Beamwidth, E-Plane	80°	
3 dB Beamwidth, H-Plane	Omnidirectional	
Impedance	50 Ω	
Gain	0 dBd (2.2 dBi)	
VSWR	VSWR ≤ 1.5 1. 138 - 156 MHz 2. 146 - 163 MHz 3. 156 - 174 MHz	VSWR ≤ 1.75 146 - 163 MHz 155 - 175 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)	
HCM Code(s)	HCM000ND00, 040DE00	

Mechanical	
Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fiber Mounting bracket : Seawater resistant aluminum, epoxy-coated Clamps: Stainless steel
Color	White (RAL 9003)
Wind Area	0.0172 sq. m / 0.19 sq. ft
Wind Load	22 N (160 km/h)
Dia. At Top End	8 mm / 0.31 in.
Dia. At Bottom End	16 mm / 0.63 in.
Length	Approx. 1300 mm / 51.18 in.
Weight	Approx. 0.76 kg / 1.68 lb.
Mounting	On 16 to 54 mm / 0.63 x 2.13 in. dia. Mast tube
Environmental	
Operating Temperature Range	-30 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

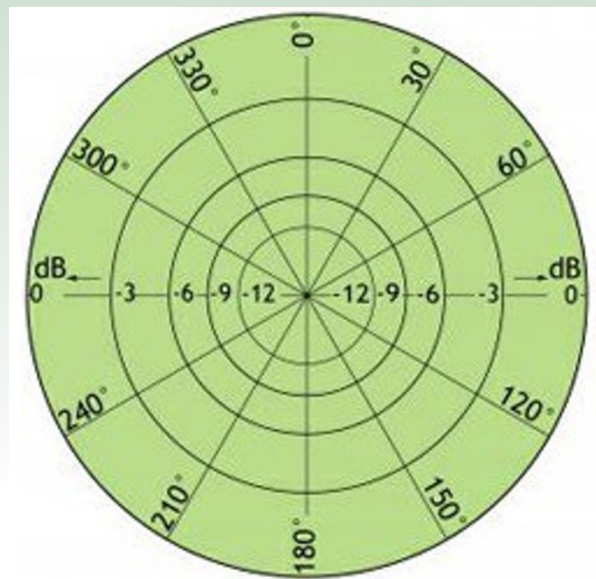
Typical VSWR and Gain Curve



Radiation Pattern

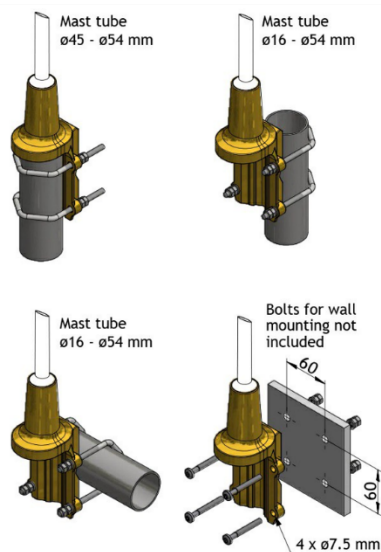


E-Plane



H-Plane

Multipurpose Mounting Bracket



Note:

The antenna is delivered with DC-connection between the antenna element and the mounting bracket.

Model Ordering Information:

Model	Description	Type	Frequency Range
104-36N-0-0-07-N	Coaxial dipole, broad-banded	N(f)	138-156 MHz
104-38E-0-0-07-N	Coaxial dipole, broad-banded	N(f)	146-165 MHz
104-37G-0-0-07-N	Coaxial dipole, broad-banded	N(f)	155-175 MHz