



DS038452-2
5/5/2023

Universal, 0 dBd Base Station and Marine Antenna - 900MHz Band

Description

- This is a 0 dBd, vertically polarized, omnidirectional rod-type base station and marine antenna which covers the 900 MHz band in three models.
- The carefully designed, broad-banded antenna element is sealed in a high-quality, conical glass fiber tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum.
- Large bandwidth with respect to both VSWR and gain.
- To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- Provided with the sturdy "LW" 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 be fed either on the outside or along the inside of the mast tube
- Vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



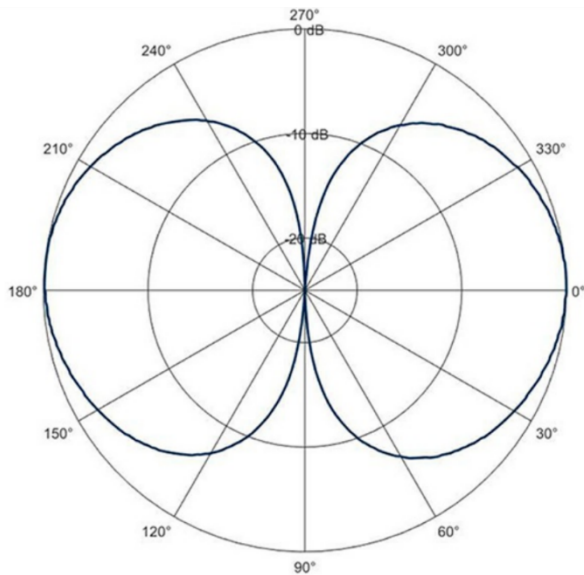
Specifications

Electrical	
Model	See model ordering information table below
Antenna Type	Coaxial dipole, broad-banded
Frequency Range of operation	Models within 824-960 MHz
Bandwidth	70-90 MHz (depends on model)
Max. Input Power	100 W
Polarization	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	< 1.5:1
Antistatic Protection	Protection All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 040DE00

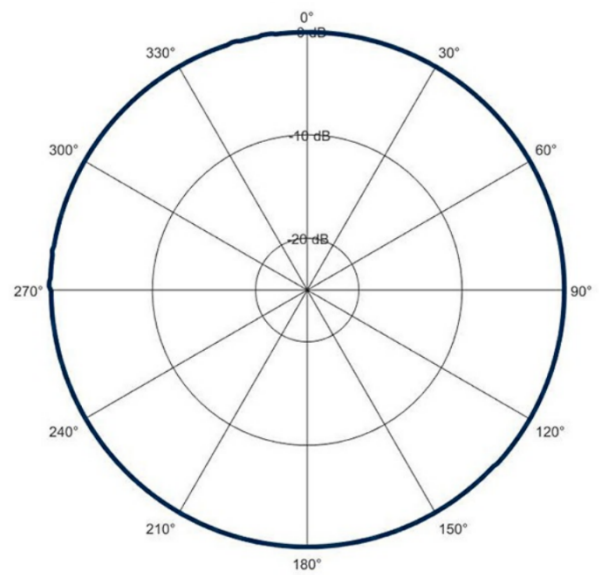
Mechanical	
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fiber Mounting bracket: Seawater resistant aluminum, epoxy-coated Clamps: Stainless steel
Color	White (RAL 9003)
Wind Area	0.012 sq. m / 0.13 sq. ft
Wind Load	14.7 N (160 km/h)
Dia. At Top End	23 mm / 0.9 in.
Dia. At Bottom End	23 mm / 0.9 in.
Height	Approx. 530 mm / 20.87 in
Weight	Approx. 0.7 kg / 1.54 lb.
Mounting	On 16 - 54 mm / 0.63 - 2.13 in. dia. mast tube

Environmental	
Operating Temperature Range	-30 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

Radiation Pattern

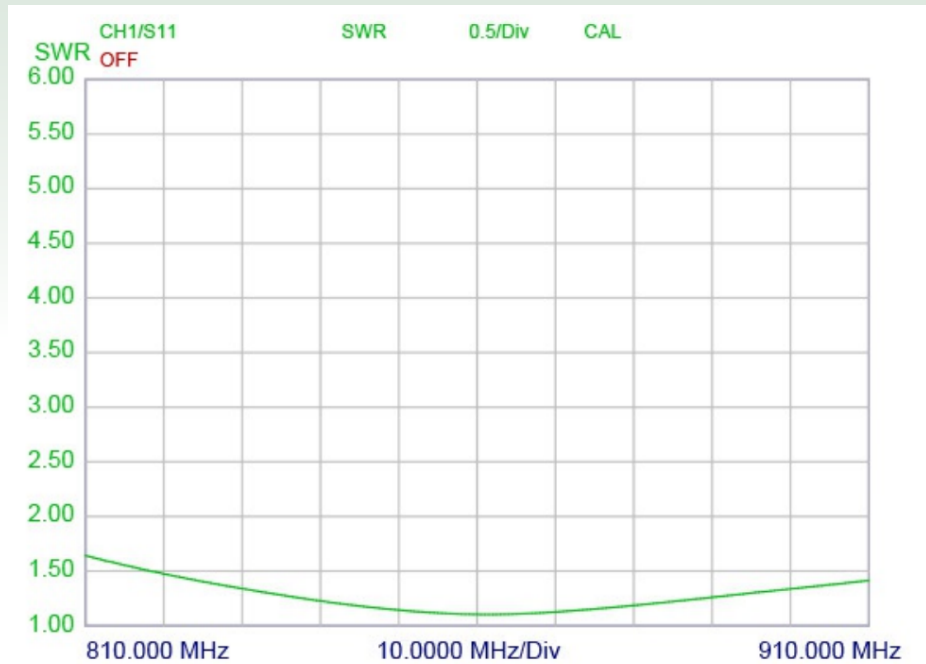


E-Plane



H-Plane

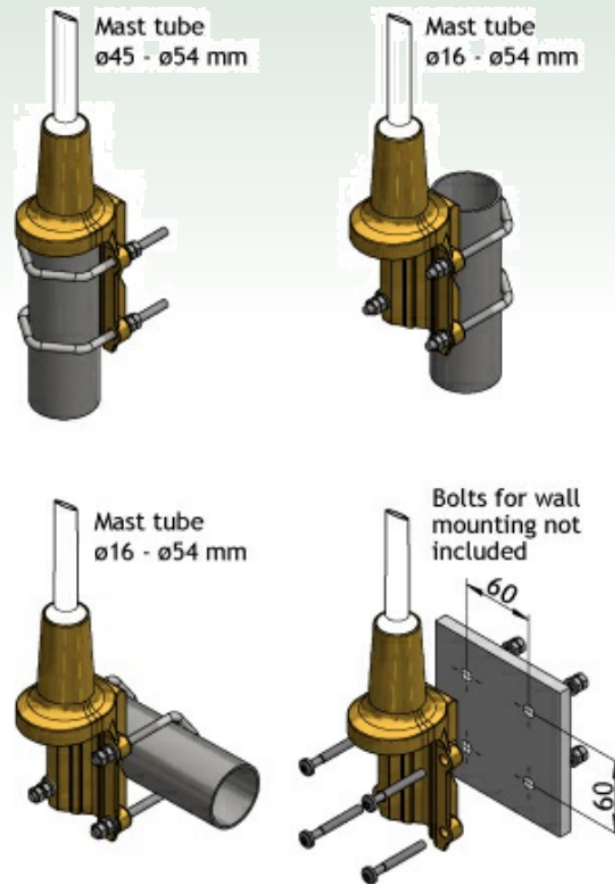
Typical VSWR Curve



Model Ordering Information:

Model	Description	Frequency Range
104-91A-0-0-07-N	Universal, 2.7 dBd Base Station and Marine Antenna - 900MHz Band	824 - 894 MHz
104-93C-0-0-07-N	Universal, 2.7 dBd Base Station and Marine Antenna - 900MHz Band	870 - 960 MHz

Mounting Details



Multi-purpose Mounting Bracket

Note:

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