



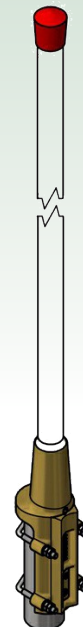
DS038469-2

5/5/2023

Universal, 3 dBd Gain Base Station Antenna for 160 MHz Band

Description

- Omnidirectional, 3 dBd, vertically polarized, base station antenna which covers the 160 MHz band.
- 160 MHz band in 3 sub-models with 10 MHz overlap and can be used in a wide variety of applications.
- The antenna is provided with our "C" mast bracket, which is a universal, epoxy-coated mounting bracket made of non-corrosive aluminum. 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.
- The phasing of the radiating elements is carefully adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum. Special emphasis has been laid on obtaining a large bandwidth both in relation to VSWR and gain.
- The broad-banded antenna element is completely enclosed in a glass fiber shroud, which will ensure performance undisturbed by corrosive environments.
- 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.
- This antenna is constructed to ensure long dependable service in all climates.

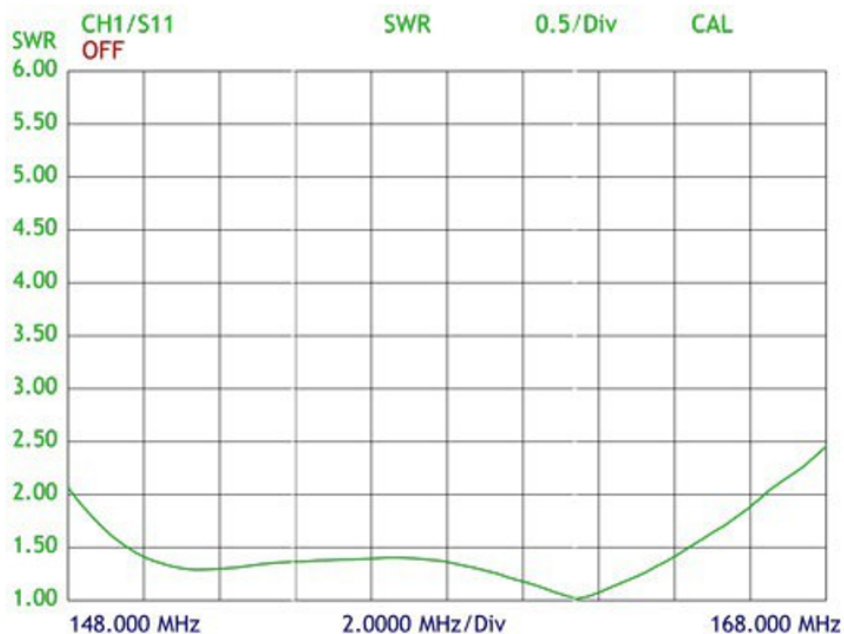


Specifications

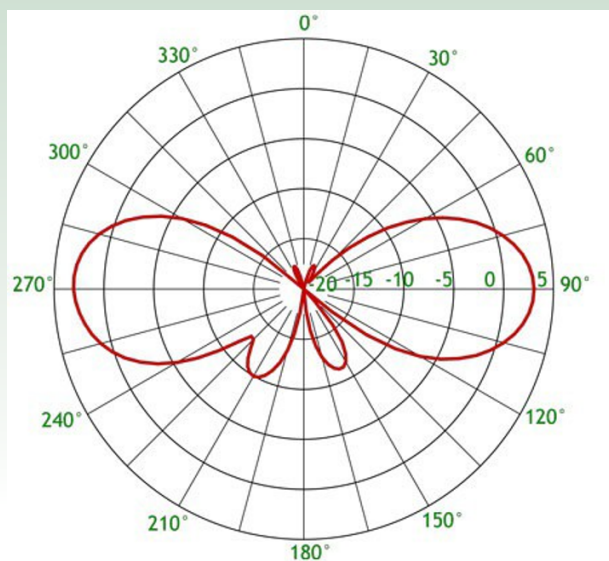
Electrical	
Model	See model ordering information table below
Antenna Type	Collinear, broad-band
Frequency Range of operation	137 - 175 MHz (see model list below for sub-models)
Bandwidth	14 MHz (depending on model)
Max. Input Power	150 W
Polarization	Vertical
3 dB Beamwidth, E-Plane	30°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	$\leq 1.5:1$
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

Mechanical	
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated
Color	White (RAL 9003)
Wind Area	0.143 sq. m / 1.54 sq. ft.
Wind Load	181 N (160 km/h)
Dia. At Top End	8 mm / 0.31 in.
Dia. At Bottom End	16 mm / 0.63 in.
Length	Approx. 2950 mm / 116.14 in.
Weight	Approx. 4.2 kg / 9.26 lb.
Mounting	On 27 - 65 mm / 1.02 - 2.56 in. dia. mast tube
Environmental	
Operating Temperature Range	-35 °C to +70 °C
Survival Wind Speed	260 km/h
Ingress Protection	IP56

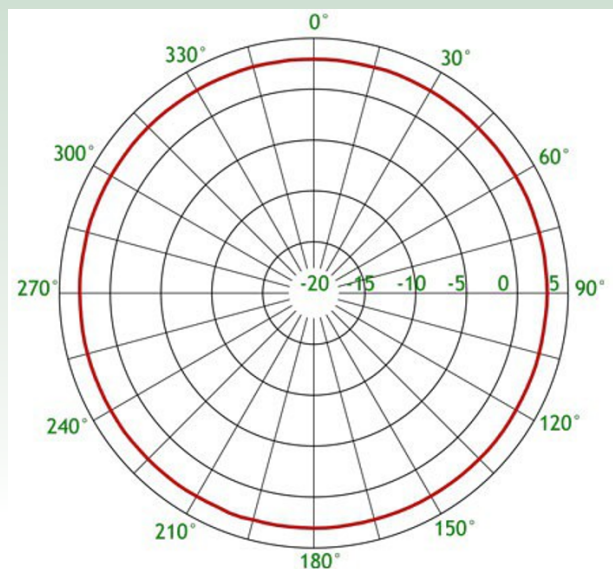
Typical VSWR Curve



Radiation Pattern

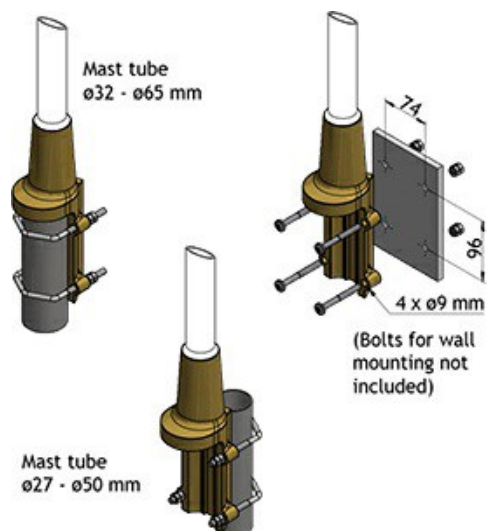


E-Plane



H-Plane

Multipurpose Mounting Bracket



Model Ordering Information:

Model	Description	Type	Frequency Range
104-36P-3-0-07-N	Collinear, broad-band	N(f)	137 - 150 MHz
104-36Q-3-0-07-N	Collinear, broad-band	N(f)	144 - 157 MHz
104-39C-3-0-07-N	Collinear, broad-band	N(f)	153 - 166 MHz
104-40B-3-0-07-N	Collinear, broad-band	N(f)	162 - 175 MHz