



DS038465-1

5/5/2023

Collinear, 3 dBd Base Station and Marine Antenna for 450 MHz Band

Description

- 3 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 340 – 520 MHz band in 7 models with up to 10 MHz overlap.
- The antenna is provided with our "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminum. The accompanying U-bolts and fittings are made of stainless steel. made of non-corrosive aluminum.
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 carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, 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.
- The exceptional mechanical capabilities of this antenna ensures long dependable service in all environments.

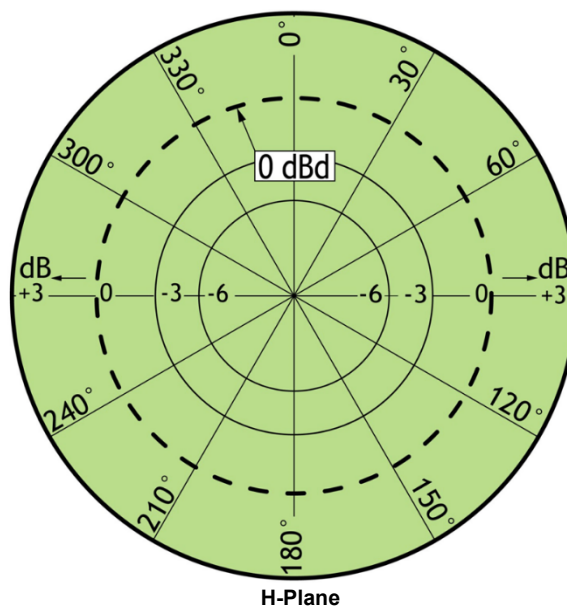
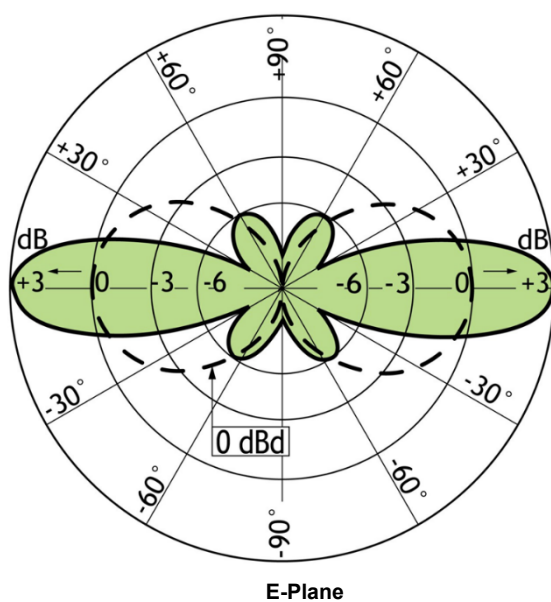


Specifications

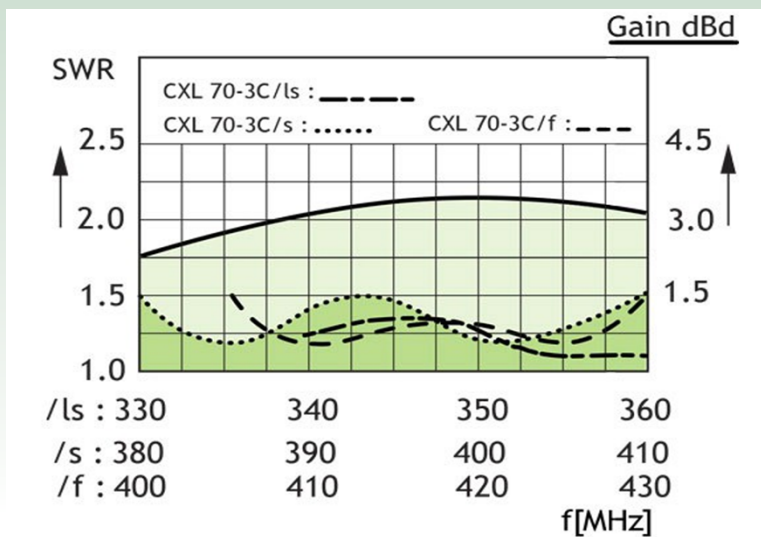
Electrical	
Model	See model ordering information table below
Antenna Type	Collinear, broad-band
Frequency Range of operation	30 MHz wide frequency segments within 340 - 520 MHz (see model list below)
Bandwidth	30 MHz
Max. Input Power	150 W
Polarization	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	30°
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 2.0:1
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

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	0.032 sq. m / 0.34 sq. ft
Wind Load	40 N (160 km/h)
Dia. At Top End	16 mm / 0.63 in.
Dia. At Bottom End	25 mm / 0.98 in.
Length	Approx. 1450 mm / 57.09 in.
Weight	Approx. 2.4 kg / 5.29 lb.
Mounting	On 27 - 65 mm / 1.06 - 2.56 in. dia. mast tube (Ordered separately) See Accessories Listed Below
Environmental	
Operating Temperature Range	-40 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

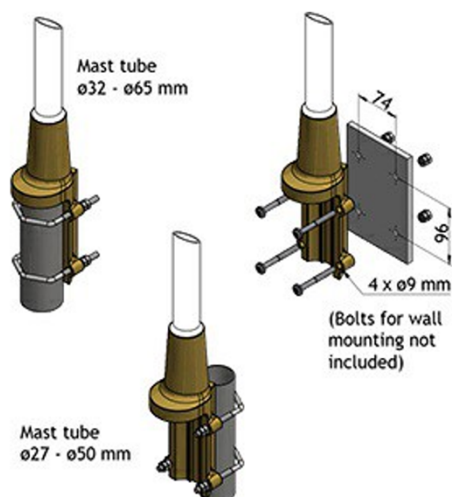
Radiation Pattern



Typical VSWR and Gain Curve



Multipurpose Mounting Bracket



Model Ordering Information:

Model	Description	Type	Frequency Range
104-57-3-0-07-N	Collinear, broad-band	N(f)	380-410 MHz
104-65-3-0-07-N	Collinear, broad-band	N(f)	406-430 MHz
104-63A-3-0-07-N	Collinear, broad-band	N(f)	420-450 MHz
104-65B-3-0-07-N	Collinear, broad-band	N(f)	440-470 MHz
104-56E-3-0-07-N	Collinear, broad-band	N(f)	340-360 MHz
104-68B-3-0-07-N	Collinear, broad-band (Contact factory for availability)	N(f)	460-490 MHz
104-74-3-0-07-N	Collinear, broad-band (Contact factory for availability)	N(f)	490-520 MHz