

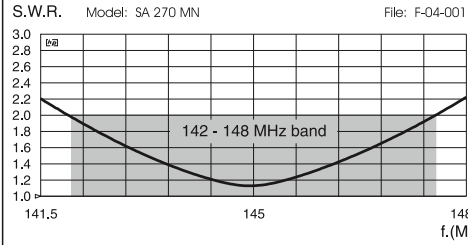
# SA 270 MN

Fiberglass Hi-Gain Dual Band Antenna for 2m & 70cm bands

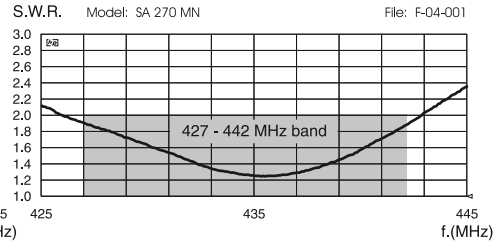


*Installation Manual*

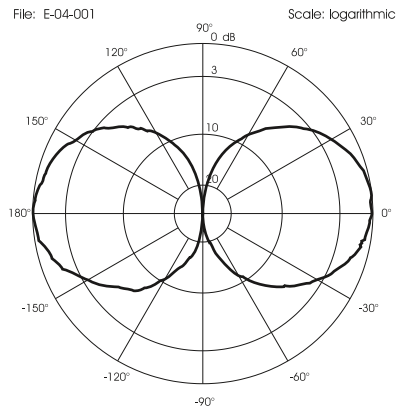
TYPICAL S.W.R. RESPONSE



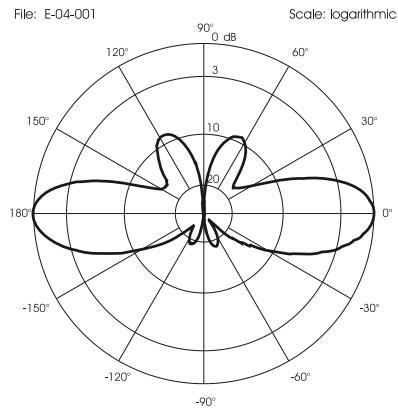
TYPICAL S.W.R. RESPONSE



TYPICAL RADIATION PATTERN in E-plane at 145 MHz



TYPICAL RADIATION PATTERN in E-plane at 435 MHz



## DESCRIPTION

Ground Plane colinear dual-band antenna for base station service working on the radio-amateur frequency of 2m & 70cm. The whip is of brass inserted in a fiberglass tube for a perfect protection from the worst climates and its radials and hardware are of stainless steel to get the maximum strength. It is supplied with a solid aluminium bracket for an easy and safe installation to the support mast.

## SPECIFICATIONS

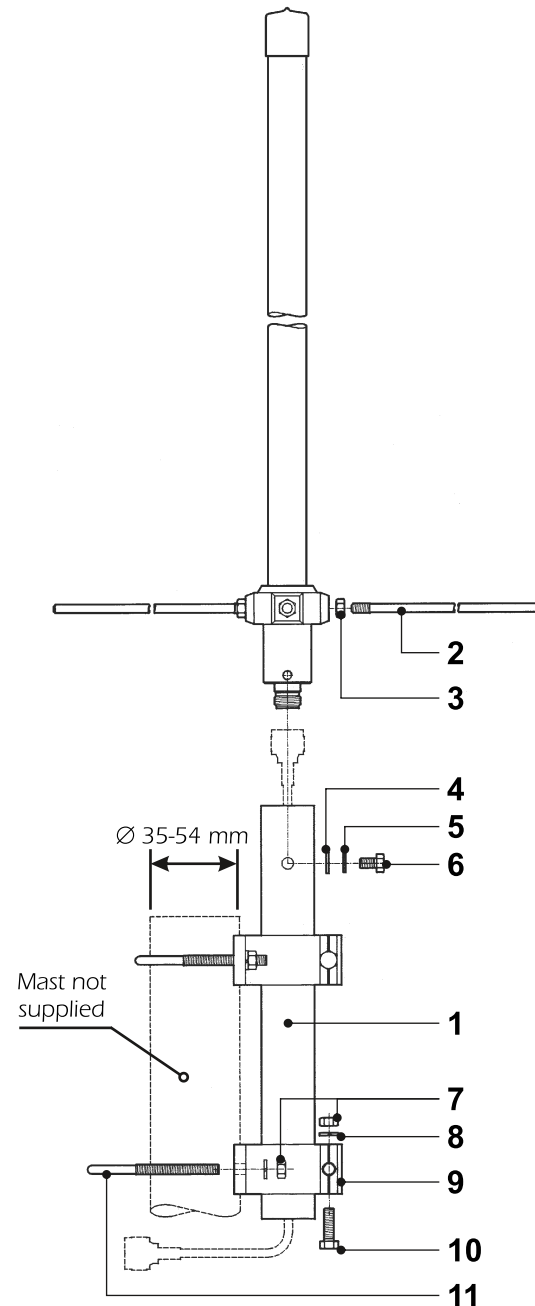
### Electrical Data

Type : VHF 6/8  $\lambda$ ; UHF 3 x 5/8  $\lambda$  Colinear  
 Frequency Range @ SWR  $\leq 2$  : VHF 142-148 MHz; UHF 427 - 442 MHz  
 Impedance : 50  $\Omega$   
 Radiation (H-plane) : 360° Omnidirectional  
 Radiation (E-plane) : Beamwidth @ -3 dB = VHF 61°; UHF 30°  
 Radiation angle deg : VHF 0°; UHF 0°  
 Polarization : Linear Vertical  
 Gain : VHF 2 dBd - 4.15 dBi; UHF 4.2 dBd - 6.35 dBi  
 Max Power : 200 Watts  
 Grounding Protection : All metal parts are DC-grounded, the inner conductor is coupled capacitively  
 Connector : N-female, Gold Plated central pin

### Mechanical Data

Materials : Fiberglass, Stainless Steel, Chromed Brass, Aluminium  
 Wind Load / Resistance : 55 N @ 150 Km/h / 180 km/h  
 Wind Surface : 0.05 m<sup>2</sup>  
 Height (approx.) : 1720 mm  
 Weight (approx.) : 1030 gr  
 Radial Length (approx.) : 170 mm  
 Mounting Mast :  $\varnothing$  35-54 mm

## MOUNTING INSTRUCTIONS



### Part list

Pos	Q.ty	Description
1	1	$\varnothing$ 29x32x250mm alu. tube
2	3	170mm Stainless steel radials

Antenna Fixing Part list  
 Re-order code: SA038

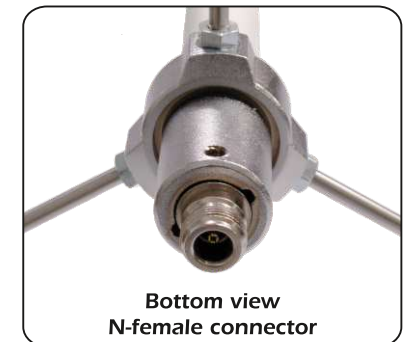
Pos	Q.ty	Description
3	3	M6 Hexagonal nut
4	1	M6 washer
5	1	M6 Spring lock washer
6	1	M6x10 Hexagonal head screw

Fixing Bracket Part list  
 Re-order code: SA104

Pos	Q.ty	Description
7	6	M6 Hexagonal nut
8	6	M6 Spring lock washer
9	2	Extruded aluminium bracket
10	2	M6x20 Hexagonal head screw
11	2	M6x188 V-bolt

### Mounting needed tools:

10 mm open key



Bottom view  
 N-female connector