



# MOONRAKER Type 100B - 100B/S - 100W

## High power capability marine HF whip antenna for professional use and GMDSS fit on ocean-going vessels

The type 100B - 100B/S -100W is a 10 metre (32.8 ft) heavy duty free standing whip antenna with a power capability of 1.2 kW PEP in the frequency range 1.6-30 MHz, designed to provide efficient and reliable communications in the professional services.

The antenna is available either side mounted (100W) or base mounted with base feed (100B) or side feed (100B/S) and is able to withstand wind speeds of 200 km/h (125 mph) without permanent deformation.

Construction is of heavy gauge marine grade aluminium alloy tubing, which provides a large low loss surface area for maximum radiating efficiency. The radiator and base flange are finished with a high durability epoxy based coating, highly resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation. The base mount is fabricated aluminium alloy with industry standard 165 mm (6.5 in) O/D flange with eight mounting holes, drilled on 140 mm (5.5 in) centres. Base insulator is ribbed high strength low loss polypropylene. Side mounting is via two ribbed low loss polypropylene insulators. Connection is via a base feedthrough insulator (B) or to a stainless steel side terminal above the base insulator (B/S) or bottom side mount (W).

For ease of transport, the antenna breaks down into three sections which slip together and fasten with stainless steel locking screws. These joints are sealed using a special jointing kit and covered with flexible boots.

A Tilting Mount which may be operated either by hand lowering or by an optional winding handle screw assisted mechanism is available permitting the antenna to be lowered and raised at will when obstructions are encountered and to facilitate maintenance. Mount construction is of hot dip galvanised coated steel with stainless and bronze fittings.

### Specifications

<b>HF Marine Band</b>	1.6-30 MHz
<b>Length</b>	10.0 metres (32.8 ft)
<b>Pattern</b>	Omnidirectional
<b>Polarisation</b>	Vertical
<b>Frequency Range</b>	Unloaded 1.6-30 MHz with suitable ATU
<b>Wind Loading</b>	72 kg at 200 km/h (158 lbs at 125 mph) Antenna survival : 200 km/h (125 mph), 55m/sec
<b>Tip Deflection</b>	5.56 m at 200 km/h (18.2 ft at 125 mph), 55m/sec
<b>Power Capability</b>	Unloaded 1.2 kW PEP
<b>Base Mounting</b>	Industry standard 165 mm (6.5 in) diameter flange with 8 x 13.5 mm (1/2 in) holes drilled on a 140 mm (5.5 in) diameter
<b>Side Mounting</b>	Two 5/8 in Whitworth bolts into two 110 mm (4.3 in) diameter side mounting insulators, spaced a minimum of 1 m (3.3 ft) apart.
<b>Connection</b>	Side feed via 1/4 in Whitworth s/s stud and lock nuts; base feed below through deckmount via 3/8in Whit s/s stud and lock nuts
<b>Packed Weight</b>	100B - 33 kg (72.6 lbs), 100B/S - 30 kg (66.1 lbs), 100W - 21 kg (46.2 lbs)

Specifications subject to change 6/01

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