



# 122BB/S

## HIGH POWER CAPABILITY BROADBAND HF WHIP ANTENNA FOR SHIPS OVER 50 METRES AND BASE STATIONS

The type 122BB/s comprises a 12 metre heavy duty, free standing whip with a continuous power capability of up to 5 kW CW. The system is intended for use in high power ECM (electronic counter measure) systems and designed to provide reliable high performance broadband communications for transmit and receive over the HF frequency band from 1 to 30 MHz without the use of an antenna coupler. With a suitable multicoupler, multiple transmitters may be used into the one antenna.

The system is extremely rugged, being designed to meet standards for vibration (167-1 Type 1) and shock (901-1 Grade A). Main construction is of heavy gauge marine grade aluminium alloy.

The antenna is base mounted and designed to withstand wind speeds of up to 225 km/h without permanent deformation. Minimal maintenance is required.

For ease of transport, the radiator comprises two tapering sections which slip together and then fasten by set screws. The epoxy fibreglass base insulator uses the accepted international footprint for 10.7 metre naval whips. The radiator and base flange are finished with a high durability coating, which is highly resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation. This provides a high degree of strength ensuring a long operational life. Standard colour is Navy Grey with other colours to order.

In many broadband systems performance is not always consistent across the band, with the result that compromises have to be made. The 12m (40ft) 122BB/S, however, exceeds the results normally achieved with the traditional 10.7m (35ft) whip and coupler system consistently throughout the band. It provides VSWR of less than 3.0:1 in the 1-30 MHz range, being typically <2.0:1.

### SPECIFICATIONS ▼

	STANDARD	OPTIONAL
<b>Colour</b>	APO Grey	Colours available to order
<b>HF Marine Band</b>	1-30 MHz	
<b>Length</b>	12 metres	
<b>Radiator Diameter</b>	127mm (8.25 in) tapering to 50.8mm at tip	
<b>Base Diameter</b>	344mm	
<b>Impedance</b>	50Ω nominal	
<b>Power Capability</b>	5kW CW	
<b>VSWR</b>	<3.0:1, typically <2:1	
<b>Pattern</b>	Omnidirectional in azimuth plane	
<b>Polarisation</b>	Vertical	
<b>Wind Survival</b>	Designed to withstand wind velocities of 224 km/h without ice; ice loading 22kg/sq m	
<b>Temperature</b>	-50 to +65°C; 100% humidity	
<b>Connector</b>	LC type on base (side feed)	
<b>Mounting</b>	Flange base with 8 equally spaced 17.5mm holes on 273mm circle, identical to current 107BB/S pattern	
<b>Weight</b>	160 kg Packed; 378kg	



## CONTACT DETAILS ▼

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Moonraker products represent the pinnacle of antenna design. With over 45 years' experience supplying Defence, Commercial and Recreational industries. Moonraker antennas are individually tuned and manufactured to our stringent extreme marine quality standards that ensure maximum performance and service life.



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