M O O N R A K E R



HF ANTENNA SYSTEMS

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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.

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 ultraviolet radiation. This provides a high degree of strength, ensuring a long operational life. Minimal maintenance is required, making 122BBS highly durable and cost effective over time.

In many broadband systems performance is not always consistent across the band, with the result of 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, providing improved efficiency and signal reliability consistently throughout the band.

It provides VSWR of less than 3.0:1 in the 1-30 MHz range, being typically <2.0:1.

Standard colour is Grey with other colours to order.

SPECIFICATIONS ▼

	STANDARD	OPTIONAL
Colour	Grey	Colours available to order
HF Marine Band	1-30 MHz	
Length	12 metres	
Radiator Diameter	210mm tapering to 80mm at tip	
Base Diameter	330.20mm	
Impedance	50Ω nominal	
Power Capability	5kW CW	
VSWR	<3.0:1, typically <2:1	
Pattern	Omnidirectional in azimuth plane	
Polarisation	Vertical	
Wind Survival	Designed to withstand wind velociti ice loading 22kg/sq m	es of 224 km/h without ice;
Temperature	-50 to +65°C; 100% humidity	
Connector	LC type on base (side feed)	
Mounting	Flange base with 8 equally spaced 17.5mm holes on 273.10mm circle	
Nett. Wt unpacked	160.0 kg	
Gross. Wt packed	316.0 kg	





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

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performance and service life.