M O O N R A K E R



HF ANTENNA SYSTEMS

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12W

MARINE HF ANTENNA FOR SMALLER MARINE VESSELS PARTICULARLY THOSE CAPABLE OF HIGH SPEEDS.

Designed to promote maximum efficiency in communications, whether transmitting or receiving, for the smaller vessel where antenna length is limited.

The 12W, a highly compact whip of 3.65m (12ft) breaks down into two easily transportable and assembled sections of 1.85m which screw together on a self locking taper.

The light-weight marine grade tempered aluminium alloy tubing provides a large low loss radiating surface, and powder coating ensures maximum protection from the marine environment and ultra violet radiation. Fittings are of nylon, stainless steel with low loss coils.

It is available unloaded or resonant at a single frequency (the highest to be used, normally 2.6, 4.6, 6.3, 8.3 or 10 MHz). For operation on frequencies lower than the resonant frequency, the difference is made up in the ATU.

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\times	STANDARD	OPTIONAL
Colour	Black	White

HF Marine Band 2-30 MHz

Length3.65 metres (12 ft)PatternOmnidirectional

PolarisationVerticalBase Diameter17mm

Frequency Range Pre-tuned to frequency, or unloaded 2-30 MHz with suitable ATU

Impedance 75Ω

Wind Loading 2.54 kg at 100 km/h 4.3 kg at 130 km/h

Power Capability 400W PEP for unloaded top sections, 250W PEP for normal loaded top

sections. Higher power to order

Mountings Two 50mm nylon clamp type insulators, 30mm diameter, threaded to take

1/4 inch Whitworth bolt (not supplied); insulator spacing not less than 38cm

Connection Silicone insulated flexible cable tail 2m long 56/0.3 tinned copper; length

should not exceed that provided for correct operation on the higher

frequencies

Packed Weight 2 kg







Assembly:

- 1. When fitting the side mounting insulators, slide them on the base section before assembling, being careful not to damage the plastic coating. Mounts may be opened by reversing the clamp screw, placing a coin or similar in the slot behind the screw and using the screw to force the slot apart.
- 2. On permanent installations use locking compound such as Loctite on top section screw thread joint. Note that some grades of Loctite will not allow disassembly, we suggest 243 grade. Do not use silicone sealant or grease on this joint.
- 3. Screw the top and base sections together. Tighten hard down by HAND, so that it locks firmly on the taper. Do not use tools.
- 4. If the top section is removed when trailing, make sure to replace it tightly when using the antenna again.

Mounting:

- 1. Make sure the mounting bolts are long enough to use the full length of thread in the insulators, but not so long that they bottom in the hole.
- 2. Mounting insulators should be spaced not less than 38 cm apart.

Important Factors

- 1. For best results the antenna should be mounted vertically (not sloping).
- 2. The length of lead supplied with the antenna should not be exceeded. Longer lead may be used if necessary, but antenna efficiency may decrease and series capacitance may be required to tune the higher frequencies.
- 3. Keep the lead clear of ship's wiring and other metallic objects and avoid running parallel to metal decks, etc., with less than 2 cm clearance.
- 4. Lead should be run as short and direct as possible between the antenna and equipment.
- 5. If using deck feed through insulator, make sure the terminals are protected from salt spray, otherwise severe loss of power may result due to leakage across the wet insulator. Moonraker feed through insulators are recommended.
- 6. Earth leads should be connected directly to the ATU and kept as short as possible.
- 7. Copper strip is recommended for earth lead between equipment and Moonraker earth plate.

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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.

