



Type 18W

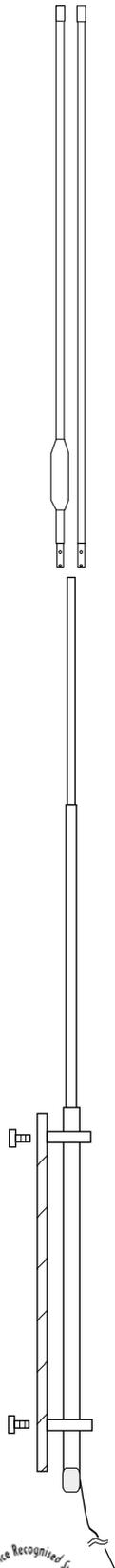
Marine HF antenna for vessels over 9 metres (30 feet)

Designed as a high efficiency compact whip, in both transmit and receive modes, for professional use in the HF Band range from 2-30 MHz.

The 18W, a 5.5m (18ft) heavy duty whip, is comprised of two sections [base: 3.65m (12ft); top: 1.85m (6ft)] which slip together and fasten with 2 stainless steel self tapping screws.

It is constructed from marine grade tempered aluminium alloy which provides a large low loss radiating surface and is fully protected by a high durability epoxy based coating resistant to chemical attack, abrasion and the effects of ultra-violet radiation. Fittings are of nylon and stainless steel with low loss coils and/or traps.

It is available unloaded, resonant at a single frequency (the highest to be used, normally 2.6, 4.6, 6.3, 8.3 or 10 MHz) or resonant at two frequencies (8.3 and 12.4 MHz). For operation on frequencies lower than the resonant frequency, the difference is made up in the ATU.



SPECIFICATIONS

Colour	Standard is Black. Optional White.
HF Marine Band	2-30 MHz
Length	5.5 metres (18 ft)
Pattern	Omnidirectional
Polarisation	Vertical
Base Diameter	23mm (0.875 in)
Frequency Range	Pre-tuned to frequency or frequencies required, or unloaded 2-30 MHz with suitable ATU
Wind Loading	4.9 kg at 100 km/h (10.8 lbs at 60 mph) 8.3 kg at 130 km/h (18.3 lbs at 81 mph)
Power Capability	800W PEP for unloaded top sections, 600W PEP for normal loaded top sections; 400W PEP for trapped top sections; higher power to order
Mountings	Two 63mm (2.5 in) nylon clamp type insulators, 35mm (1.375 in) diameter, threaded to take 3/8 inch UNC Whitworth bolt (not supplied). Minimum insulator spacing not less than 60cm (2 ft)
Connection	Silicone insulated flexible cable tail 2m long (6.5 ft) 56/0.3 tinned copper; length should not exceed that provided for correct operation on the higher frequencies
Packed Weight	4 kg (8.8 lbs) with mountings

Specifications subject to change – Issued 07/13



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18W INSTALLATION INSTRUCTIONS

Assembly

1. When fitting the side mounting insulators, slide them on the base section before assembling. 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. For ease of maintenance lightly smear the top section slip joint with grease and push firmly together.
3. Tighten screws firmly and lightly smear joint with neutral clear silicone.
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 60 cm (24 in) 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 (3/4 in) clearance. We recommend Moonraker stand off and cable run insulators.
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 at least 50 mm (2 in) wide is recommended for earth lead between equipment and Moonraker earth plate.
8. Sealant should be non-acid neutral cure type. Acid cure type sealant will attack copper and aluminium.



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