

## Section 6

### MARINE ANTENNAS

Updated 22 May 2011

## HM218/M and HM223/M HF Marine Mast Mount or Side Mount

**Frequency**  
2 – 30 MHz

**Bandwidth**  
Requires ATU



Models HM218/M and HM223/M are suitable for all HF marine communications in the 2 to 30 MHz frequency range. These longer antennas offer top performance together with a two-piece light weight construction enabling easy dismantling and storage.

The antennas are designed to couple with your HF radio transmitter via an Antenna Tuning Unit (ATU).

The two-piece white fibreglass radome is fully sealed and packed tight with closed cell foam to protect the internal braided copper radiator, prevent rattles and maximise service life in harsh marine conditions. The copper radiator terminates on a stainless steel stud above the mount tube, to which the 6 metre high voltage feed cable attaches. Mount tubes do not carry RF voltage.

To broaden your choice of mounting positions, both mast mount and side mount clamps are available.

For mounting to a mast, 2 x UAM180L galvanised steel parallel clamps are recommended for a round mast between 40 mm and 75 mm in diameter.

Side mounts are nylon and include ½"-BSW stainless steel fasteners. These allow easy mounting to the side of a wheelhouse or other vertical flat surface. Order NSM218 or NSM223 according to the antenna model. 2 nylon side mounts are necessary. Drill a 12.7 mm (½") diameter hole through the wall for the stainless steel bolt and then firmly secure each side mount in position.

SPECIFICATIONS	HM218/M	HM223/M
<b>Construction</b>	Two-piece white fibreglass radome, copper radiator, chromed brass joining ferrules, stainless steel mount tube	
<b>Frequency Range</b>	HF 2 to 30 MHz with suitable Antenna Tuning Unit (ATU)	
<b>Tuning</b>	Tuning limits are determined by the ATU Grounding systems may also affect the ATU tune range	
<b>Gain</b>	2.1 dBi	2.1 dBi
<b>Max Input Power</b>	500 Watts PEP	1,400 Watts PEP
<b>Impedance (Nom.)</b>	ATU is required to match the antenna to 50 Ohms	
<b>Polarisation</b>	Vertical	Vertical
<b>Termination</b>	6 metres of 20 kv single core cable fitted with a terminating lug for antenna terminal supplied	
<b>Assembled Height</b>	6.0 metres	8.1 metres
<b>Weight</b>	3.0 kg	8.0 kg
<b>Shipped Length</b>	3.6 metres	4.0 metres
<b>Shipped Weight</b>	5.0 kg	12.0 kg
<b>Projected Area</b>	0.136 metres <sup>2</sup>	0.215 metres <sup>2</sup>
<b>Wind Load 160 kph</b>	16.46 kg, 0.163 kN	25.99 kg, 0.255 kN
<b>Mount Tube Dimensions</b>	600 mm long x 38 mm diameter	840 mm long x 50 mm diameter
<b>MAST Mounting Clamps (not supplied)</b>	2 x UAM180L heavy duty galvanised steel parallel clamps are recommended. Suit round mast between 40 mm and 75 mm in diameter.	
<b>SIDE Mounting Clamps (not supplied)</b>	2 x NSM218 will suit the 38 mm mount tube	2 x NSM223 will suit the 50 mm mount tube
<b>For the replacement fibreglass Top section only</b>	Order HM218/TP	Order HM223/TP



Nylon Side Mount

*Since tuning limits are determined by the ATU, clients contemplating purchase of these antennas should verify that their ATU specification will load the given length of radiator for the chosen model at the lowest frequency desired.*