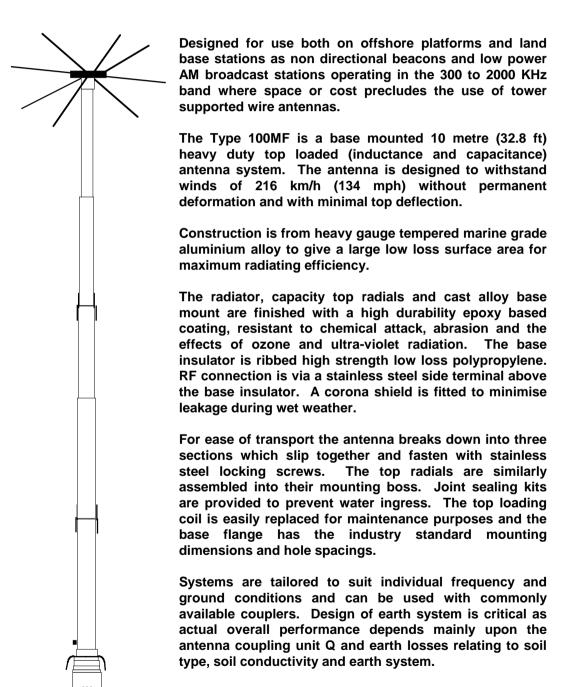


Type 100MF

Professional high quality self supporting MF antenna system



Specifications subject to change – Issued 01/09/13



Moonraker Australia Pty. Ltd. ABN 70 162 868 475 Tasmanian Technopark, Dowsing Point, Tasmania, Australia 7010 Website: www.moonraker.com.au Tel: 61 (0)3 6273 1533 Fax: 61 (0)3 6273 1749 Email: radiocom@moonraker.com.au The following performance figures are theoretical and based upon the assumption that the following installation conditions apply:

- The antenna is mounted in a location that is reasonably clear from other antennas and metal structures which may absorb power, cause distortion of the omnidirectional pattern and affect tuning.
- Earth loss resistance of 1Ω and an ATU (coupler) working Q of 300. Radiation efficiency is directly affected by earth system and ATU losses.
- Field strength is the expected value based on 100w CW input to the antenna and over an unobstructed sea water path. Performance for land based systems will differ.

Colour	Colour to Order		
Frequency Range	300-500 kHz (with suitable ATU); may be extended to 2000 kHz		
Overall Length	10m (32.8ft)		
Top Loading	8 x 2m (6.5ft) radials and loading coil, overall diameter 4m (13.1ft)		
Radiator Diameter	101.6mm (4 in) at base tapering to 50mm (2 in) at top		
Pattern	Omnidirectional		
Polarisation	Vertical		
Power Capability	100w CW plus 100% amplitude modulation		
Wind Survival	216 km/h (134 mph/60 m/s)		
Top Defection	Less than 3m (9.8ft) at 216 km/h (134 mph)		
Mounting	285mm (11.2 in) diameter with 6 equally spaced 13mm (9/16 in) holes on 243mm (9.6 in) diameter		
Connection	Via 12.7mm ($\frac{1}{2}$ in) Whitworth stainless steel stud and lock nuts		
Earth Mat	Systems available to suit site conditions		
Radiation Efficiency	300 kHz: 1.5%; 500 kHz: 4.9%		
System Bandwidth	300 kHz: 1.128 kHz at -3 dB; 500kHz: 1.990 kHz at -3 dB		
Effective Base Capacitance	300 kHz: 258 pf; 500 kHz: 291 pf		
Unattenuated Field	300 kHz	400 kHz	500 kHz
Intensity at 100 Nautical	62 μv/M +36dB	87 μv/M +39dB	111μv/M +41dB
Miles	ref 1μv	ref 1µv	ref 1µv
Approximate Weights	Antenna 83 kg (166 lbs), Tilt Mount 26.5 kg (58 lbs)		
	Packed: Antenna 92 kg (205 lbs), Tilt Mount 30 kg (66 lbs)		

Specifications