



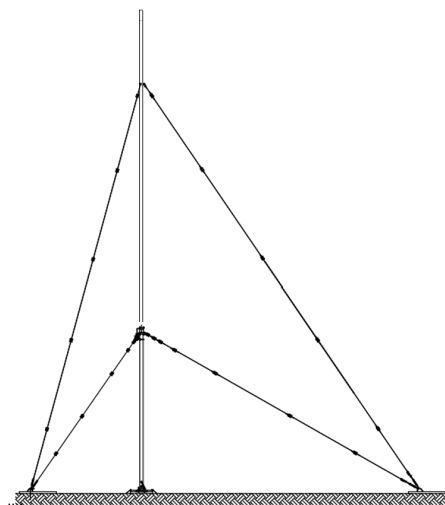
This monopole antenna has been designed for HF receiving applications where high reliability is required. The antenna is suited for use in an array.

This antenna will provide good performance from 1.5 to 32 MHz. For enhanced performance, models MLB-130 and MHB-65 can be used together to provide separate low band and high band receiving elements. Refer to external document link.

The antenna consists of two rugged aluminium tubes with a solid insulator fitted approximately one-third of the way up from the base of the antenna. A transformer is fitted across the insulator that provides a suitable impedance transformation to a 50-ohm coaxial cable. The combination of elevated feed-point height and transformer impedance provides a good impedance match over a wide operating bandwidth.

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A radial earth mat of any length, consisting of up to 64 copper wires can be fitted to the base of the antenna, to stabilise antenna impedance and radiation patterns.



**FEATURES / BENEFITS**

- Rugged, high-reliability construction
- Proven performance over many decades in harsh environmental conditions
- Cyclonic wind rating

**Technical features**

**ELECTRICAL SPECIFICATIONS**

Frequency Range	MHz	1.5 - 32
Polarization		Vertical
Elevation Radiation Pattern		Refer to plot
Azimuth Radiation Pattern		Omni Directional
Maximum Power Rating	kW	0.25 average
Input Connector		N-type socket
Impedance (unbalanced), ohms	$\Omega$	50

**MECHANICAL SPECIFICATIONS**

Antenna Ground Dimension	m	Depends on length of buried ground radials, typically 26m x 26m using ground radials with 13m length
Wind Survival Rating (no ice)	km/h (mph)	337 (209)
Wind Load Comment		See Note 1

**TEMPERATURE SPECIFICATIONS**

Operating Temperature Range	$^{\circ}\text{C}$ ( $^{\circ}\text{F}$ )	-20 to 70 (-4 to 158)
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**MATERIAL**

Material - Guys		Insulated Stainless Steel, Phillystran option.
Material - Radiators		Aluminium Tube
Material - Earth Mat		Up to 64 copper radials, Length as required

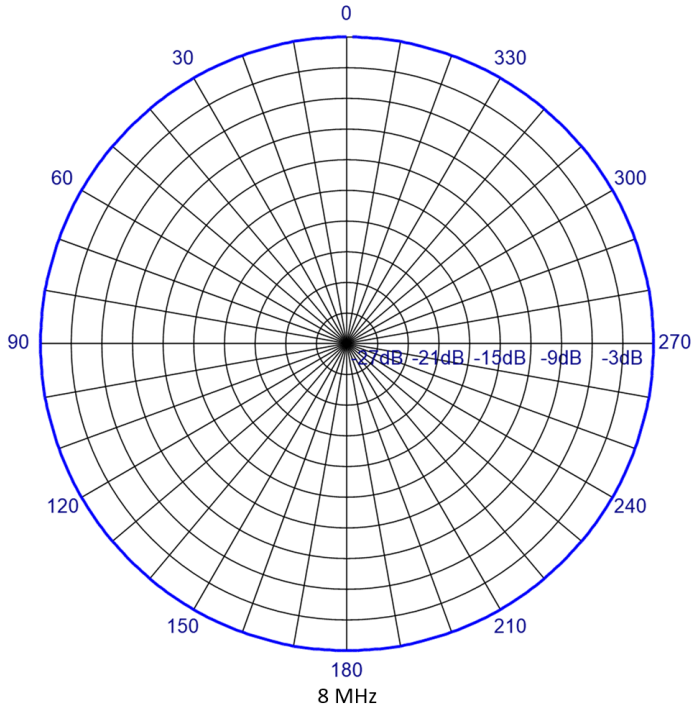


**PACKAGING INFORMATION**

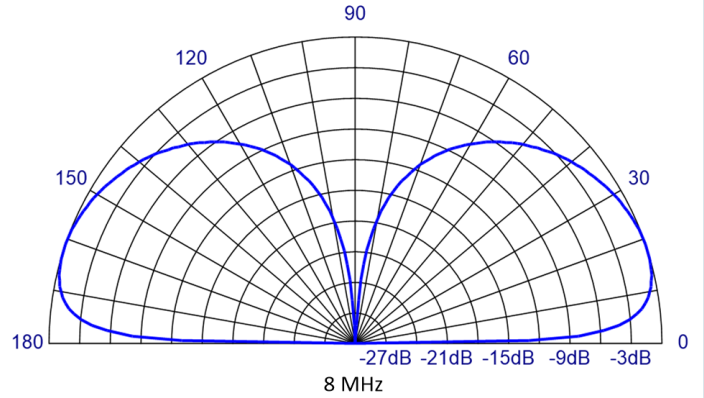
Shipping information	Packed weight [kg]	Packed size [m]
MLB-130	264	8.8 x 0.2 x 0.15 and 1.2 x 1.2 x 0.6

**PATTERNS OVER AVERAGE GROUND WITH 64 BURIED RADIALS OF 13M LENGTH**

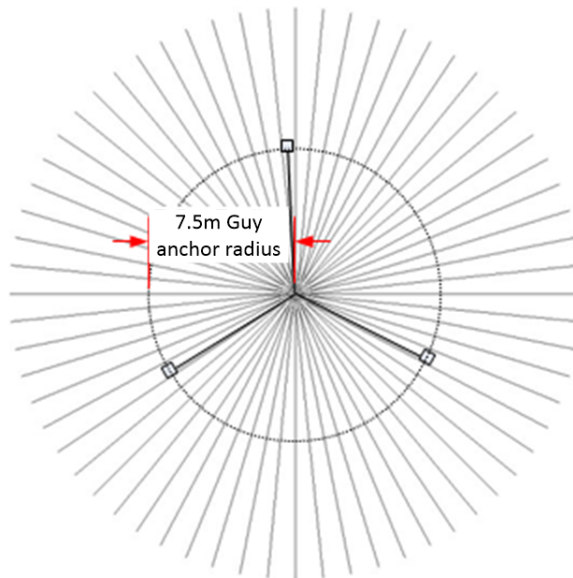
**AZIMUTH RADIATION PATTERN**



**ELEVATION RADIATION PATTERN**



**ANTENNA GROUND DIMENSIONS**



The length of the earth radials sets the ground dimensions



External Document Links

Notes

1. Wind ratings are calculated to Australia standard AS1170.2:2011