



This monopole antenna has been designed for HF receiving applications where high reliability and stable performance are required. The antenna is suited for use in an array. The antenna consists of two rugged galvanised steel tubes with a ceramic insulator fitted approximately one-third of the way up from the base of the antenna.

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.

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. 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 external document link.

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
- No antenna guys are required.
- 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 | Ω | 50 |

MECHANICAL SPECIFICATIONS

| | | |
|-------------------------------|------------|---|
| Antenna Ground Dimension | m | Depends on length of buried ground radials, typically 12m x 12m using ground radials with 6m length |
| Mounting | | Single concrete footing in ground |
| 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) |
|-----------------------------|---|-----------------------|

MATERIAL

| | | |
|----------------------|--|---|
| Material - Radiators | | Galvanised steel |
| Material - Earth Mat | | Up to 64 Copper Radials, Length as required |

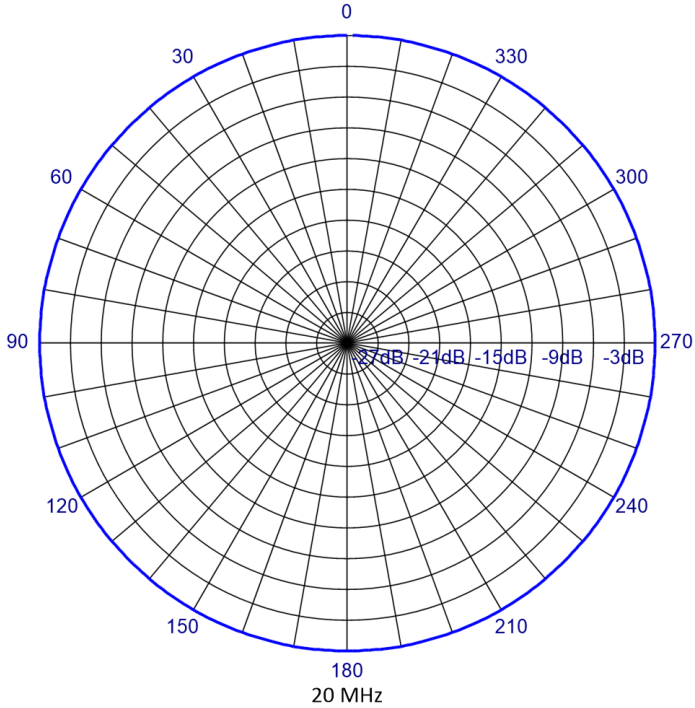


PACKAGING INFORMATION

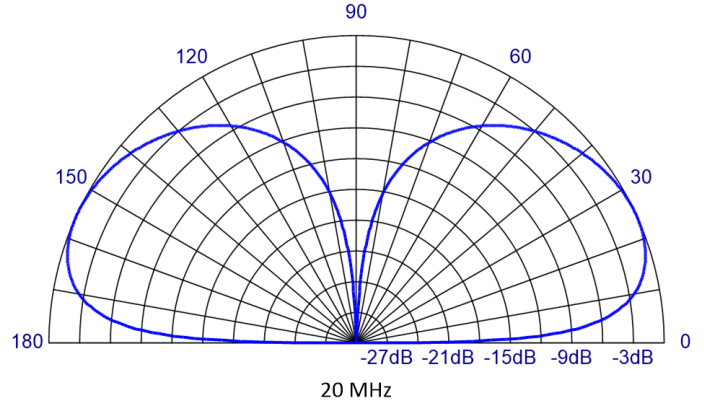
| Shipping information | Packed weight [kg] | Packed size [m] |
|----------------------|--------------------|-------------------------------------|
| MHB-65 | 300 | 6.0 x 0.4 x 0.4 and 1.2 x 1.2 x 0.6 |

PATTERNS OVER AVERAGE GROUND WITH 64 BURIED RADIALS OF 13M

AZIMUTH RADIATION PATTERN



ELEVATION RADIATION PATTERN



External Document Links

[mlb-130 v02.pdf](#)

Notes

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