

SeaSonde Antenna Dimensions

Dec 1, 2003

Operating Frequency	Receive Ant. Vertical Whip	Receive Ant. Horiz. Whips (protruding from 4 sides)	Transmit Ant. Vertical Whip	Transmit Ant. Horizontal Conductors serving as ground
4 to 6 MHz	2.4 m	2.4 m	14 m* (no post required)	8-m radial wires on ground**
11.5 to 14 MHz	2.4 m	2.4 m	4.8 m	2.4 m whips
24.0 to 27 MHz	2.4 m	1.2 m	2.4 m	1.2 m whips
40.0 to 44 MHz	~1.4 m	~0.56 m	N/A	N/A

NOTES:

- All antennas (except the 4-6 MHz Long Range transmit antenna) rest upon posts of approximately 4 m height, ~6.5 cm diameter. These antennas can be mounted higher than 4 m, but we provide the 4m posts as part of the system package.

*The height of the Long Range transmit antenna is close to 14m, but the "flag pole" version Long Range transmit antenna varies. Typically the "flag pole" antenna it is close to 12m height.

- All transmit antenna ground planes (except the Long Range transmit antenna) have two horizontal whip elements that protrude from antenna just above the 4 m tall post. Their lengths vary upon frequency.

**The Long Range transmit antenna requires a unique ground plane. The Long Range antenna ground plane consists of radial wires approximately 8 m in length that must be fanned out on or immediately below the ground surface extending toward the water. In the case of water on one side only there are typically nine radial wires used and fanned across 180 degrees. Sixteen wires are commonly fanned out over 360 degrees if there is water in all directions. If a more suitable ground is available (e.g., if the antenna is lashed onto the metal frame of an offshore platform) then no radial elements are necessary.

- All receive antenna ground planes consist of four horizontal whip elements that protrude from the receive antenna box sitting just above the 4 m tall post. Their lengths vary upon frequency.

- Two versions of 25 MHz antenna systems are available: The TX and RX antennas can be co-located onto a single post, or the RX and TX antennas can each operate from separate posts. Typically the combined single post antenna is the preferred configuration. There are situations when separating the two antennas may be beneficial. Consult Codar prior to ordering.