

CL-HD Antenna

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OVERVIEW

Nautel's Cardinal Helideck Antenna (CL-HD) is a self supporting LF/MF antenna which is intended for use around the world on offshore oil and gas platforms and buildings. The CL-HD is designed for operation in the frequency band of 190-1800 kHz and designed for compliance to CAP437.

The CL-HD is installed around the perimeter of the helicopter landing decks, below the deck level. The radiating element of the CL-HD is composed of 4.8 mm (3/16 in.) diameter multi strand, stainless steel wire rope for enhanced environmental reliability. The radiating element is suspended on insulators secured at the end of 1.22 m (4 ft.) support poles which are attached to the helideck. The support poles can be clamped, bolted or welded to the helideck safety net support posts.

Nautel has designed the antenna with the cost sensitive customer in mind. The customer need only purchase the required length of radiating element and the required number of standoff support poles/insulators required for their application. The CL-HD can be ordered in multiple sections of 9.84 m (25 ft.) and is supplied in kit form. Each 9.84 m (25 ft.) section includes 9.84 m (25 ft.) of antenna radiating element and one standoff support pole/insulator. Two end sections are supplied as standard with each CL-HD antenna. Each end section includes an additional 9.84 m (25 ft.) of antenna radiating element, one stand-off support pole/insulator and one insulator. One 6.1 m (20 ft.) stainless steel antenna downlead for connection between the CL-HD antenna radiating element and the Antenna Tuning Unit output is also provided.

The efficiency and range of the CL-HD antenna is dependent upon a number of factors: frequency, physical height above sea level, ground loss resistance, ATU efficiency and transmitter power.

Nautel can assist its customers in determining the estimated efficiency and range of the system prior to purchase.

SPECIFICATIONS

Maximum Ice Load

19 mm (3/4 in.) Radial

Maximum Wind Velocity

Up to 190 kph (120 mph)

Capacity

≈ 9.8 pf/m (3 pf/ft)

Frequency Range

190 - 1800 kHz

Antenna Length

Site dependant (standard kit of 91.5 m/300 ft.)

Antenna Standoff Distance

1.22 m (4 ft.)

Pattern

Omni directional

Polarization

Vertical

Power Capability

125 W Average (500 W PEP)

Mounting

By clamping, bolting or welding to helideck safety net supports

RF Connection

4.8 mm (3/16 in.) diameter Stainless Steel Cable with lug suitable for mounting to 6.4 mm (1/4 in.) dia. bolt.

Options

IP66 rated Antenna Tuning Unit

125 W Non-Directional Radio Beacon

