UrsaNav® UN-007 E-Field and UN-008 H-Field Antennas

GENERAL OVERVIEW

In general, there are two types of antennas that are used for Loran reception: E-field and H-field. A UN-007 is a vertical E-field antenna that responds to the electric field. A UN-008 is a horizontal antenna that responds to the magnetic field. The UN-008 has two loops, oriented 90 degrees apart, that are combined such that it can achieve an omnidirectional pattern.

PRODUCT HIGHLIGHT

E-field antennas are typically used for time and frequency recovery, land-mobile, and maritime purposes. They may also be used for handheld devices.

H-field antennas are used to suppress undesirable properties such as precipitation static noise (P-static), ground plane sensitivity, and power line distortion. H-field antennas are particularly useful in avionics applications because they are insensitive to antenna corona (local discharge). Another useful feature of an H-field antenna is its ability to determine azimuth to one (1) degree or better of true north.

KEY FEATURES

- E-field antennas are typically sensitive to P-static, require a ground plane, have high impedances, have good SNR, and are sensitive to power lines and corona.
- H-field antennas are typically insensitive to P-static, do not require a ground plane, have low impedances, have better SNR, and are less sensitive to power lines and insensitive to corona.

UN-007 E-Field Antenna

UN-008 H-Field Antenna

SPECIFICATIONS

UN-007 E-FIELD ANTENNA	96.5 x 309.9 CM 3.8 x 2.2 IN
UN-008 H-FIELD ANTENNA	203.2 x 87.1 CM 8.0 x 3.4 IN