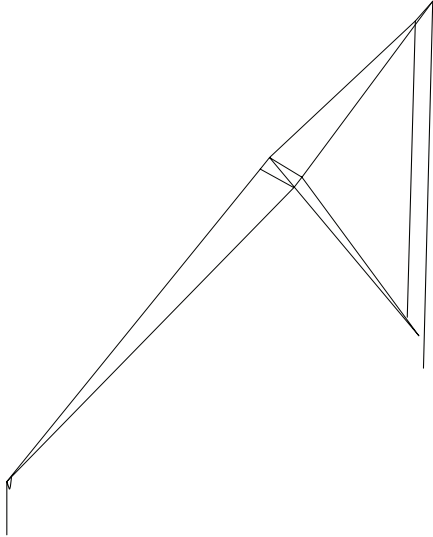


BASE ANTENNA SEMI-DELTA



The Semi-Delta Antenna is an economical broadband base station antenna suitable for short to medium distance HF communications. The compact design of the antenna makes it suitable for installations that have limited space available.

PERFORMANCE

The Semi-Delta Antenna supports operation over the frequency range of 2 to 14 MHz, and is capable of full duty cycle voice and data operation at the rated power levels.

The antenna is an omni-directional antenna but has a good combination of high and low angle radiation to support both NVIS and longer distance HF communications.

The broadband design of the antenna eliminates the need for a separate antenna tuner unit, the antenna is connected to the transceiver via a single coaxial cable.

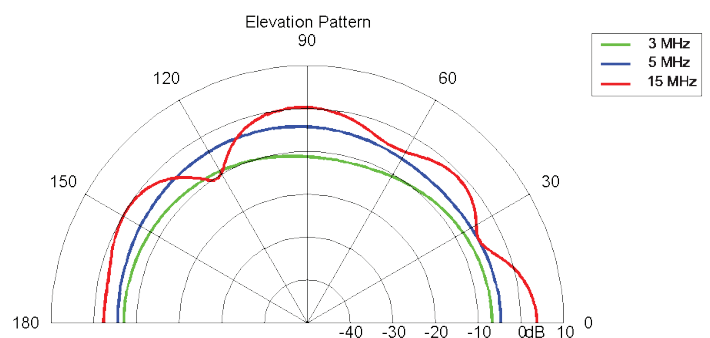
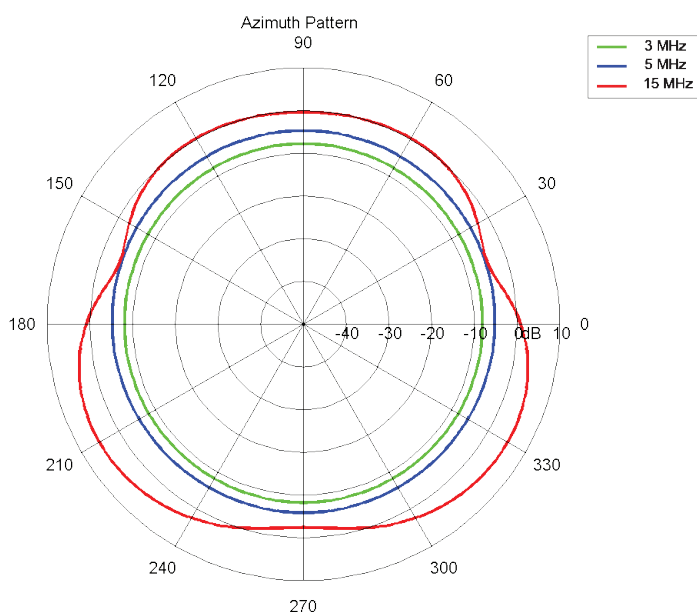
Manufactured using materials designed for long service life, the Semi-Delta is built to survive in harsh outdoor environments.

INSTALLATION

The antenna requires a high anchor point of 15 m and a lower anchor point of 1.5 to 2 m, separated by 20 m. It is supplied partially assembled to minimise shipping size. However, it can be assembled quickly and easily without special tools.

The coaxial feed cable is connected to the balun that is conveniently located at the lower end of the antenna. For ground installations with poor soil conductivity or roof top installations with non-conductive roof materials, it is recommended a counterpoise system is fitted to maximise antenna performance.

RADIATION PATTERNS



Note: Antenna radiation patterns are based on perfect earth conditions.
Azimuth plots are at 35° elevation. Elevation plots are taken broadside from antenna.

BASE ANTENNA SEMI-DELTA



CODAN
COMMUNICATIONS

SPECIFICATIONS

ELECTRICAL

Frequency range	2 to 14 MHz
Power rating	400 W PEP (240 W average) or 1000 W (600 W average)
Nominal impedance	50 Ω
VSWR	Typically < 2.5:1
RF connector type	UHF-type (400 W), N-type (1000 W)

MECHANICAL

Mast heights	15 m mast and 1.5 to 2 m stub mast
Mast spacing	20 m
Balun mounting	2 x U-bolts to suit 50 mm diameter tube
Wind rating	160 km/hr, no ice
Packed weight	8 kg (400 W), 11 kg (1000 W)
Packed dimensions	880 mm x 340 mm x 100 mm (excluding mast hardware)
Installation hardware	Pulley/halyard suitable for a 15 m mast

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

ACCESSORIES

- Coaxial cables (RG58 or low loss RG213)
- Lightning protection
- Copper earth strap
- Earth stake