

V86 marine corrections antenna

Dedicated L-Band and MF Beacon combined antenna, with narrow-band filter for marine applications

Dedicated L-Band antenna for maximum corrections performance, even at high latitudes

The V86 antenna is a quad-helix design to ensure reception of L-Band signals at all elevations, tracking L-Band signals down to 10° elevation to maintain reception at low elevation angles, even in polar/high-latitude regions.

The V86 antenna only tracks L-Band signals across the 1525 - 1585 MHz frequency range. It incorporates a narrow-band filter, which makes it less susceptible to out-of-band radio frequency (RF) interference.

Reception of correction services from multiple sources

The V86 antenna supports L-Band from 1525 to 1585 MHz, which supports all correction services from Hexagon | Veripos. This includes both Differential GNSS (DGNSS) and Precise Point Positioning (PPP), which provide robust and reliable positioning.

Additionally, the V86 antenna can receive corrections broadcast via the MF Beacon network (283.5 — 325 kHz).

Durable, future-proof design made for harsh marine environments

This rugged antenna is enclosed in durable, waterproof housing and meets IEC60945 specifications for marine applications.



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Benefits:

- Quad-helix design to ensure reliable reception of L-Band signals at all elevations — ideal for high-latitude operations
- Incorporates MF Beacon capability
- Marine-certified antenna for use in all marine applications



Frequency

Passbands

Upper Band	1525 — 1585 MHz
Lower Band	285 — 323 MHz
MSK Beacon (MF)	283.5 — 325 kHz
Narrow-band filter for interference rejection	

Specification

Polarisation Right Hand Circular (RHCP)

Axial Ratio 3 dB Max @ Boresight

Radiation Coverage

6.0 dBic	0° = 0°
-2.0 dBic	0° < θ < 75°
-3.0 dBic	75° ≤ θ < 80°
-4.0 dBic	80° ≤ θ < 85°
-5.0 dBic	HORIZON

Low-Noise Amplifier (LNA)

Gain	36 dB (±2 dB)
Noise Figure	2.6 dB (Max)
Impedance	50 Ω
Voltage Standing Wave Ratio	≤ 2.0 : 1

Antenna Phase Centre

L1 North	-0.34 mm	East	-0.53 mm	Up	58.24 mm
L2 North	0.11mm	East	-0.76 mm	Up	68.35 mm

Physical and electrical

Dimensions 142.5 x 183 mm (5.6 x 7.2 in)

Weight 635 g

LNA DC Voltage Input +5 to +15 VDC

Current 55 mA (typical)

Enclosure Material Weatherable Polymer

RF Input Connector TNC Female

Antenna Mounting 5/8in-11 UNC-2B Adapter

Environmental

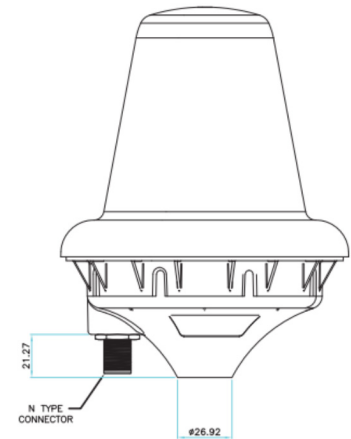
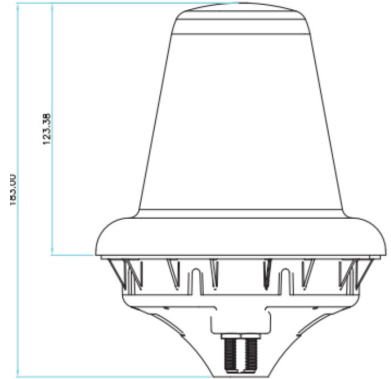
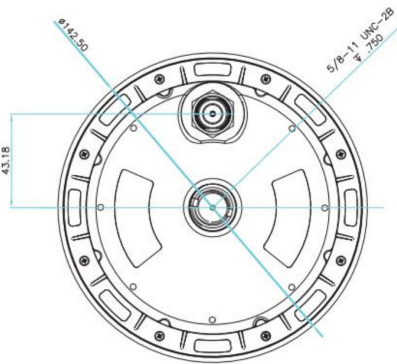
Temperature

Operating	-40°C to +71°C
Storage	-50°C to +85°C

IP Rating IP67

Compliance

- CE
- FCC
- RoHS3
- WEEE
- EN 60945 (Exposed Equipment)



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