

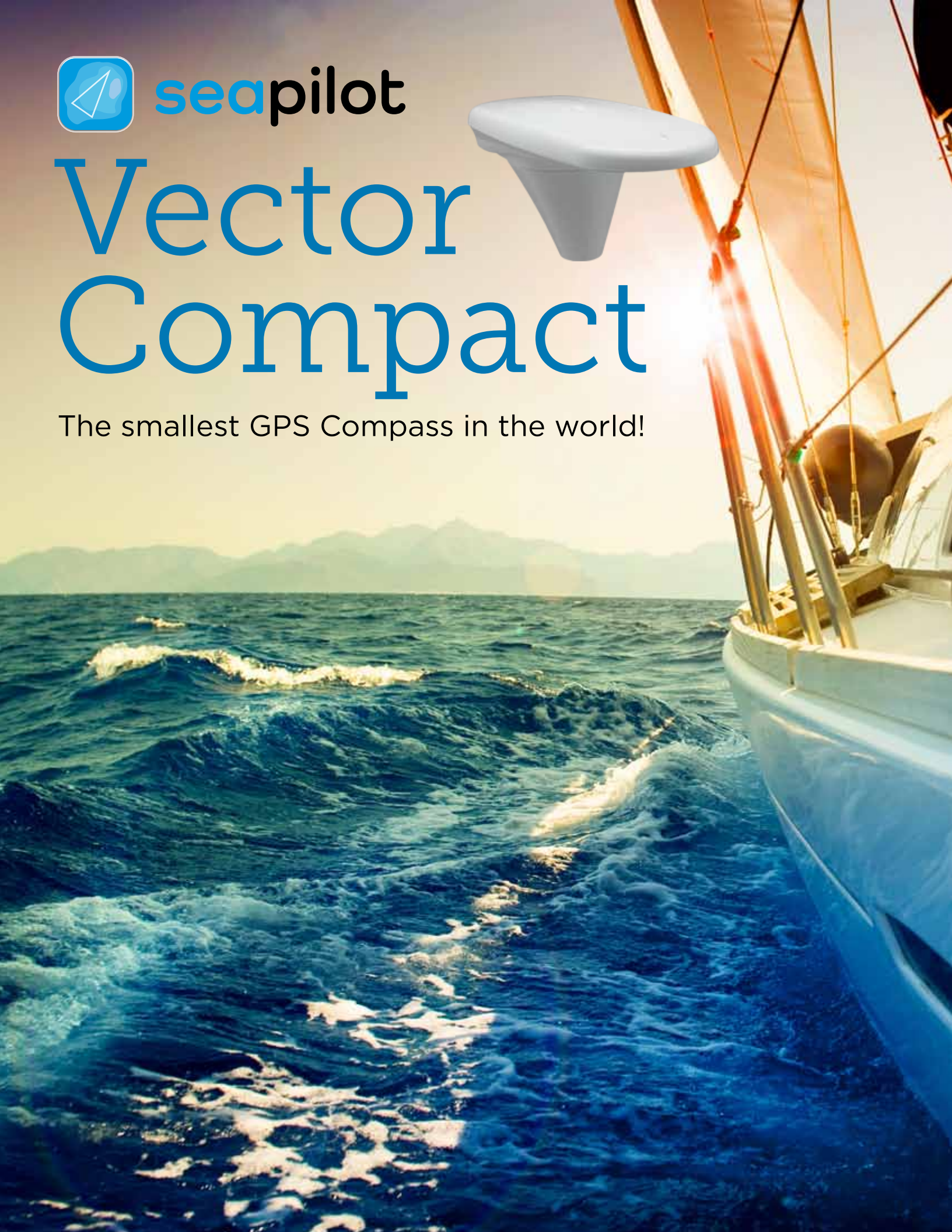


seapilot



Vector Compact

The smallest GPS Compass in the world!



The smallest GPS compass in the world!

Seapilot proudly offers boaters an exciting innovation: the world's smallest GPS compass at only 10 inches in length, priced under \$1000 for flush mount or pole mount installations! More accurate and stable than a magnetic or fluxgate compass, the Vector Compact provides incredible accuracy and stability to drive your navigation devices. Now everyone can afford this advanced technology normally reserved for larger commercial vessels to accurately drive your navigation system. Perfect for interfacing with your Seapilot AIS and Tablet Navigation App, or existing radar, autopilot and chart plotters.

The Vector Compact houses dual GPS receivers and antennas with a single clock to provide the most accurate compass heading and boat position, for the money and size. Thanks to a unique antenna and receiver, designed to optimize rejection of multipath satellite signals which plague most other satellite compass designs, the Vector Compact operates reliably in most installation environments.

The compass heading output of the Vector Compact is superior to fluxgate and rate sensor compasses, but no longer at a cost premium. Additionally, you get the bonus

of highly accurate GPS positioning of better than 2 feet. That means your Position Over Ground and Speed Over Ground (SOG & COG) calculations are very precise and very stable when viewed on a chart plotter or interpreted by your other navigation equipment.

The Vector Compact provides its heading and position information at 10 times a second and can track turns (ROT) at 90 degrees per second; a professional grade solution, perfect for all boats, even at high speeds. A built in professional rate gyro smooths and always maintains the heading output, even in heavy seas or during signal blockages.



The Vector Compact GPS Compass provides incredibly accurate and stable heading and positioning data to autopilots, radar overlays and chart plotters.



Technical specifications

GPS Sensor Specifications

| | |
|----------------------|---|
| Receiver Type: | Dual Front-end GPS L1 Compass |
| SBAS Tracking: | 2-channel, parallel tracking |
| Update Rate: | 10 Hz standard (pos & heading) |
| Horiz. Accuracy: | <50cm RMS (with SBAS DGPS ¹) <3.0 m RMS (without SBAS ²) |
| Heading Accuracy: | 2° rms |
| Pitch/Roll Accuracy: | 2° rms |
| Heave Accuracy: | 30 cm ³ |
| Rate of Turn: | 90°/s maximum |
| Comp. Safe Dist.: | 30 cm (11.8 in) |
| Cold Start: | < 60 s (no almanac or RTC) |
| Warm Start: | < 20 s typical (almanac and RTC) |
| Hot Start: | < 1 s typical (almanac, RTC and position) |
| Heading Fix: | < 10 s typical (valid position) |

Physical

| | |
|----------------------|--|
| Dimensions: | 25.9 L x 12.9 W x 4.5 H cm (10.2" L x 5.1" W x 1.8" H) |
| Weight: | 0.42 kg (0.9 lb) |
| Power/Data connect.: | 8-pin Male for Serial or 5 Pin Male NMEA 2000 Micro connector |

Electrical

| | |
|--------------------|-----------------------|
| Input Voltage: | 8 to 36 VDC |
| Power Consumpt.: | ~ 2 W nominal |
| Current Consumpt.: | 165 mA @ 12 VDC |
| Power Isolation: | Isolated to enclosure |

| | |
|------------------------------|-----|
| Reverse Polarity Protection: | Yes |
|------------------------------|-----|

Communications

| | |
|--------------------------|---|
| Ports: | Vector Compact-S: 2 full duplex RS-232; 4800-115200 baud rates Vector Compact-N: NMEA2000 ⁴ interface |
| Correction I/O Protocol: | RTCM SC-104 |
| Data I/O Protocol: | NMEA 0183 or NMEA 2000 |

Environmental

| | |
|------------------------|--------------------------------------|
| Operating Temperature: | -30°C to + 70°C (-22°F to + 158°F) |
| Storage Temperature: | -40°C to + 85°C (-40°F to + 185°F) |
| Humidity: | 100% non-condensing |
| Vibration: | IEC 60945 |
| EMC: | FCC Part 15, Subpart B, CIS PR22, CE |

Aiding Devices

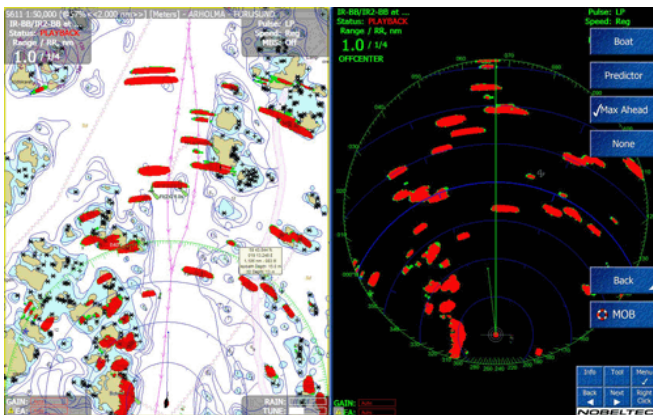
| | |
|---------------|--|
| Gyro: | Smooths heading output, improves signal reacquisition and maintains heading for up to 3 minutes if GPS signal is lost. |
| Tilt Sensors: | Assists in fast startup of heading solution. |

1 Depends on multipath environment, number of satellites in view, satellite geometry, ionospheric activity and use of SBAS

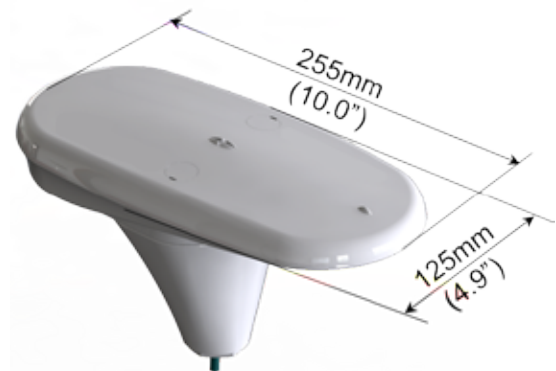
2 Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity

3 Based on a 40-second time constant

4 NMEA 2000 model only.



The Vector COMPACT GPS Compass gives invaluable support to radar overlay, sonar and autopilot performance so that full achievements can be obtained from all navigationsystems onboard.





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SEE YOU AT SEA!



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