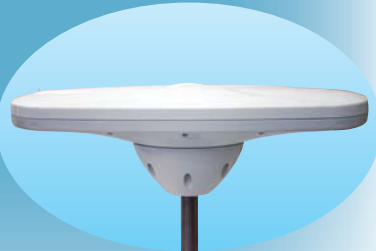


# Model GPC-500



## Featuring:

**Affordable GPS-based heading sensor and positioning system** consisting of a precision GPS engine, dual antennas, a single-axis gyro, and a tilt-sensor, all integrated into a single sturdy package for ease of installation. (Patented<sup>\*1</sup>)

**Outputs stable heading data** accurate up to 0.75 degrees (RMS) or better at a fast rate even while the vessel stays stationary, in addition to submeter-accurate position information with differential corrections applied.

**Combination of the built-in gyro and tilt-sensor** provides short start-up times and continual backup heading updates in the event of losing a GPS heading.

**COAST<sup>TM+2</sup> technology** allows old DGPS correction data to be utilized during a temporary loss (in excess of 40 minutes) of GPS signals without significantly degrading the data quality.

**SBAS-enabled**, compatible with free, public satellite-based differential GPS systems, including WAAS<sup>\*3</sup>, EGNOS<sup>\*4</sup> and MSAS<sup>\*5</sup>. Optional IALA<sup>\*6</sup> beacon receiver available.

**Requires only a single cable** (power and data) connection and operates over a wide range of input voltages.

**Compass Display Unit Model CD-100** optionally available for direct connection.

## Specifications

- **GPS Receiver:** 2 × 12 ch. parallel (2 × 10 ch. with SBAS), 1575.42 MHz, C/A code
- **Data Update Rate:** 10 Hz (standard), 20 Hz (option)
- **Heading Accuracy:** Better than 0.75°rms (with invalid warning by relay contacts)
- **Position Accuracy:** 1 m/3.5m (95%) with/without DGPS corrections, without S/A
- **Rate of Turn:** 90°/second (maximum)
- **Start-up Time/Heading Fix Time:** Less than 60/30 seconds, typical
- **Interface:** 2XRS-232C full duplex, 1XRS-422 half duplex, 4800-115200 baud
- **DGPS Beacon Receiver Interface:** RTCM SC-104. Beacon receiver option
- **Protocols:** NMEA-0183 (data I/O), NMEA-2000 (binary messages)
- **Power Requirements:** 11-36 VDC, less than 5W
- **Weight and Size:** 1.2 kg (without mount), 500L × 152W × 80H mm
- **Environment:** Compliant with IEC 60945-2002 (exposed category)

<sup>\*1</sup> Hemisphere GPS Crescent Vector Technology

<sup>\*2</sup> Trade Mark of Hemisphere GPS

<sup>\*3</sup> Wide Area Augmentation System (operated by U.S. FAA)

<sup>\*4</sup> European Geostationary Satellite Navigation-Overlay Service

<sup>\*5</sup> Based on Multifunctional Transport Satellite (MTSAT, administered by Japanese Govt.)

<sup>\*6</sup> International Association of Marine Aids to Navigation and Lighthouse Authorities