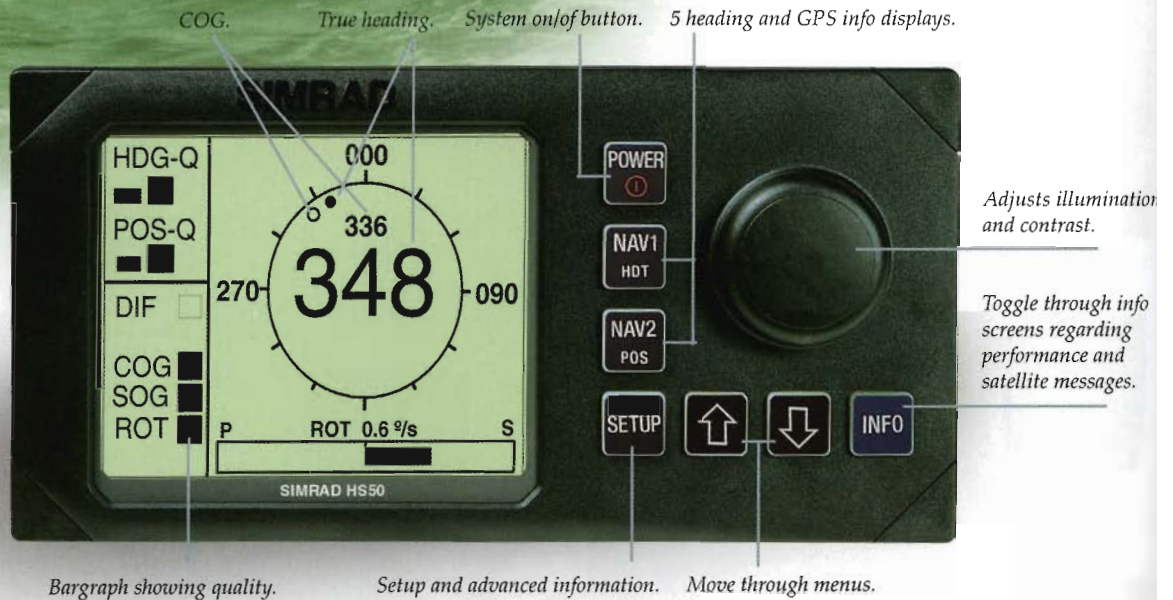


## HS50 - A new economic and flexible GPS Compass for back-up...

**SIMRAD**  
**HS50**  
**COMPASS**



The HS50 is a north seeking GPS compass outputting true heading with no moving parts, reducing the requirement for service dramatically. Position, speed and rate of turn information are extras that come standard with this product.

### Economic and reliable

The HS50 replaces several vessel instruments, such as a gyrocompass, GPS navigator and speed log in one compact navigation package. In addition the HS50 provides added position redundancy with two complete GPS receivers.

### Features

- True heading anywhere on earth
- Heading accuracy unaffected by the latitude
- Heading available for 5 minutes in periods of GPS drop-outs
- More accurate heading during and after turns compared to heading from standard gyrocompasses
- 20 Hz update rate on heading, rate of turn and position measurements
- Six individually configurable RS-232 or 422 output serial lines
- Output data on Ethernet
- Distribution of data by High Speed network

### Perfect accuracy

Precision heading is derived from the fixed-distance dual GPS antenna arrangement in the Sensor Unit, using carrier phase data to generate heading information independent of latitude and vessel dynamics. GPS position and velocity are calculated from both of the two antennas, which gives total redundant position and velocity sources in this product.

DGPS signals may be input to the HS50 to improve position and velocity accuracy. The inertial rate element provides yaw information. In case of short GPS signal loss, the internal rate sensor automatically

takes over as the prime source for heading determination until the GPS comes back on line. The rate element and GPS are working together seamlessly to ensure accurate, continuous and robust heading information even when the vessel is stationary.

### Easy to install and operate

The HS50 requires no scheduled maintenance or re-calibration. The HS50 offers a flexible configuration of the outputs and interface setups, depending on the application and vessel. It is easy to operate, install and align.

HS50 Antenna.



HS50 Processing unit.

HS50 Display unit.

The HS50 consists of an Antenna, a Processing unit and a Display unit. The Antenna contains two GPS sensors and an inertial rate element. The Processing unit contains the main computer, serial interfaces and high speed communication, and the Display unit has a LCD for navigation information and user control buttons.