The Oceanstar Berthing system is a decision-making tool that provides important information during this critical operation. The information includes approach speeds, rate of turn, distance-off the quayside and target position.

**A GNSS BASED BERTHING AID**

Oceanstar uses multiple survey grade Global Navigation Satellite System (GNSS) receivers to measure the vessel’s position, orientation and movement with centimetre-level precision.

These observations are then combined with known quay coordinates in order to provide vital information while berthing.

The system uses state of the art GNSS technology including Precise Point Positioning (PPP) and Real Time Kinematic (RTK) processing concepts and is able to utilise satellite data from multiple constellations (GPS, GLONASS, Galileo and Beidou) which ensures unsurpassed accuracy and availability.

**CLEAR PRESENTATION**

Oceanstar provides precision guidance information in a simple and easy to understand graphical view. The system displays fore and aft distance-off information, approach speeds, accelerations, heading and rate of turn.

Target distances are calculated using a built-in database of quay coordinates. The data has either been pre-surveyed or previously recorded in Oceanstar; the system continually accumulates and updates information about different ports and berths.
**SAFE AND EFFICIENT**
Oceanstar berthing information allows the master or pilot to make quick decisions when manoeuvring in confined areas. This leads to safer and more efficient berthing operations, with fewer incidents and time saved.

For additional safety the system has two built-in alarm functions:

- **Quay Impact Alarm**
  An alarm will sound when the vessel’s approach speed at a given distance is greater than the set speed limits.

- **Quay Drift Alarm**
  Alongside the quay, Oceanstar monitors the vessel’s fore and aft position and can activate an alarm if the vessel drifts away from the pre-set limits.

**EASY TO USE**
The Oceanstar berthing system requires minimal training. Quay selection is automatic and distances-off the quay are displayed during approach.

Oceanstar can be equipped with additional bridge wing displays or may be integrated with selected INS systems in order to utilise existing screens.

**MARINE SPECIFICATIONS**
The system is designed to be compliant with the relevant standards for maritime navigation and radio communication equipment and systems.

- IEC 60945 – General requirements
- IEC 62288 – Presentation of navigation-related information on shipborne navigational displays
- IEC 61161 – Digital interfaces

Oceanstar shows approach speeds, heading and rate of turn as well as berthing distances, all on one display, illustrated here dimmed for dusk viewing conditions.