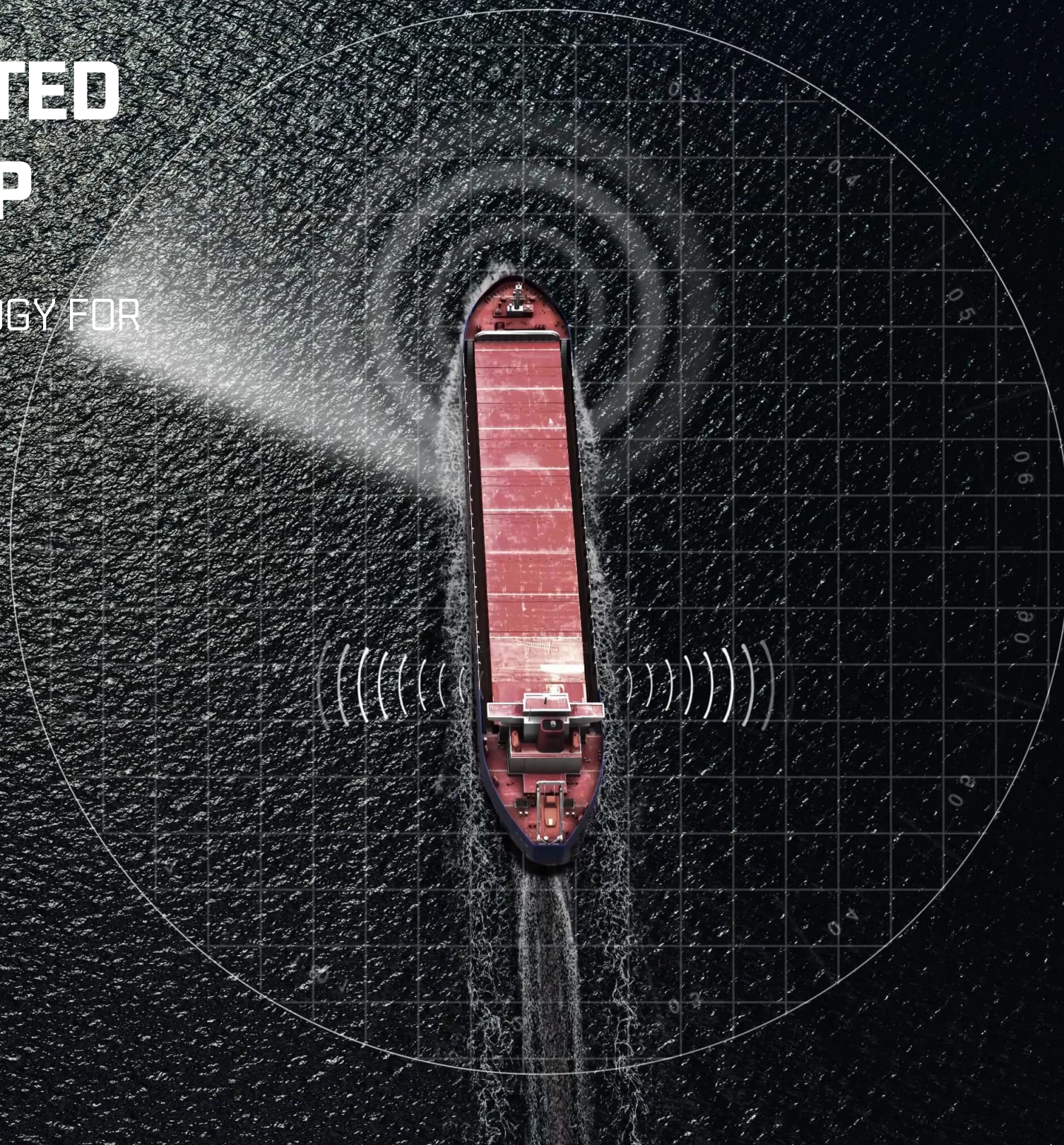


TELEOPERATED SIREHNA®DP

SEA PROVEN TECHNOLOGY FOR
REMOTE OPERATIONS



SIREHNA has developed a remote controlled system designed to ensure ship control and navigation safety during remote operations. The operator is able to supervise the operations from the shore center and has a direct control on the navigation with the SIREHNA®DP System & Autopilot.

The solution includes:

- SIREHNA®DP System & Autopilot
- Maritime environment perception
- SIREHNA®BRIZO module for collision alerts
- Fail safe function
- Communication system for all range of operations
- Shore center

Environment perception based on radar, AIS video technologies ensure navigation awareness and the SIREHNA®BRIZO system enhances the navigation safety (collisions & risks prevention)

The communication system (secured protocol & video broadcasting) guarantees a high level of availability according to operational needs (5G, S-band or VSAT).

A fail safe function has been developed by SIREHNA to ensure the ship control even in case of communication loss.

- **CERTIFIED DP & AUTO PILOT**
- **ENVIRONMENT PERCEPTION**
- **COLLISION ALERT**
- **COMMUNICATION SYSTEM**
- **SHORE CENTER**
- **NEW BUILD OR REFIT**

TELEOPERATED SIREHNA®DP SOLUTION



AUTO PILOT
DP



ENVIRONMENT
PERCEPTION



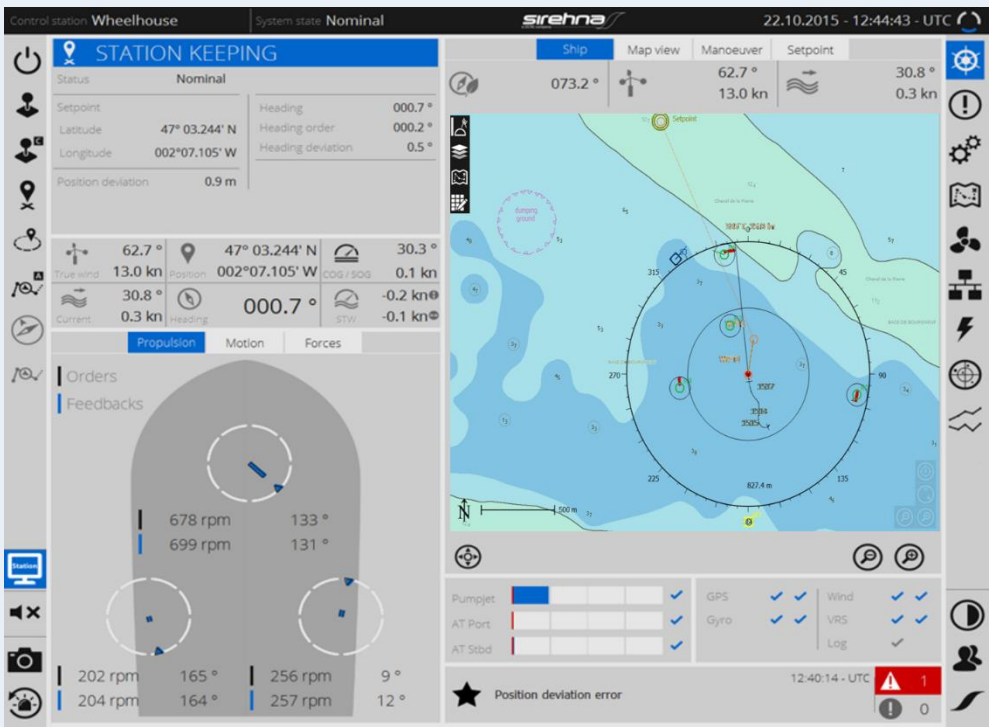
OBSTACLE & COLLISION
ALERT



COMMUNICATION
SYSTEM



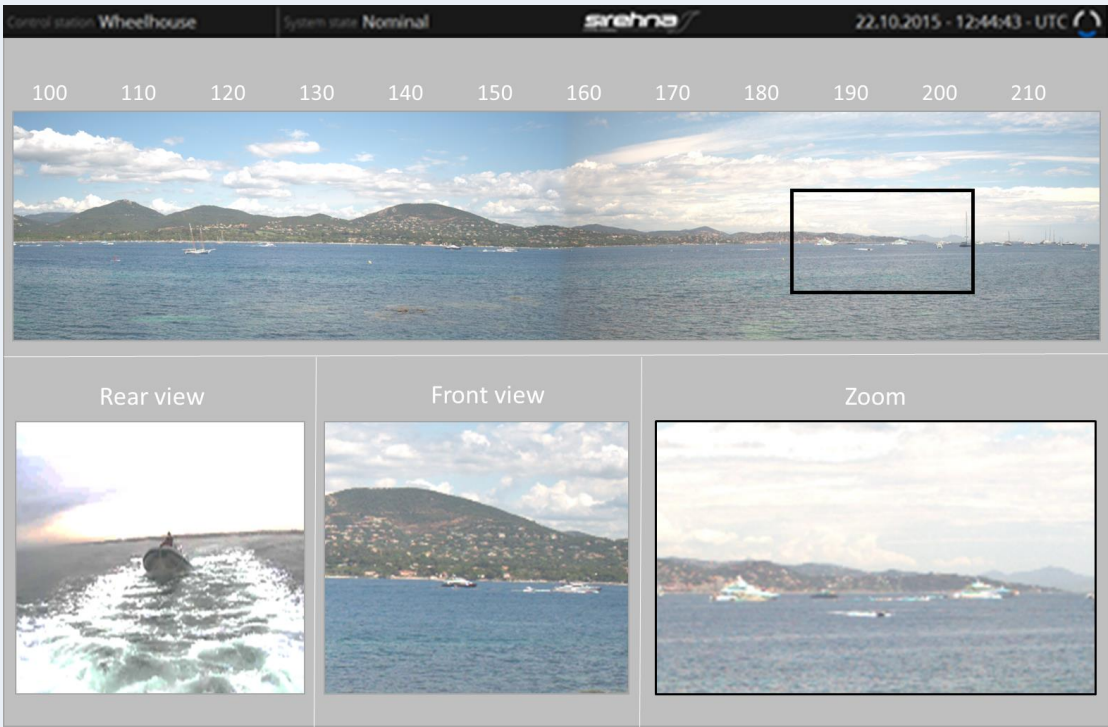
SHORE
CENTER



DP Control station

SIREHNA's shore center & the DP control Station allows remote control from a departed DP control station:

- Control modes activation (Joystick, Station keeping...)
- Performances monitoring (Position, heading, speed)
- Navigation equipment management (propulsion, navigation sensors)
- System Monitoring & Alarms management



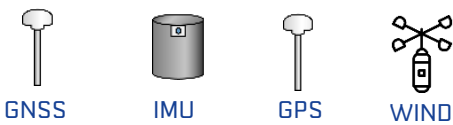
Navigation Awareness Station

SIREHNA's shore center & Navigation awareness station displays to the operator a full perception of the operational environment:

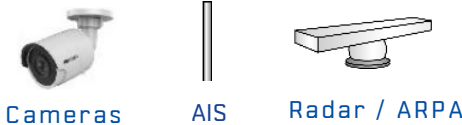
- Panoramic view up to 360°
- Custom views (Rear, front, zoom)
- Obstacle detection & collision alert (COLREG)
- Suggested obstacle avoidance maneuver (advanced function)

TELEOPERATED SIREHNA®DP ARCHITECTURE

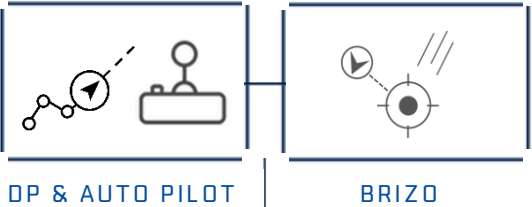
NAVIGATION SENSORS



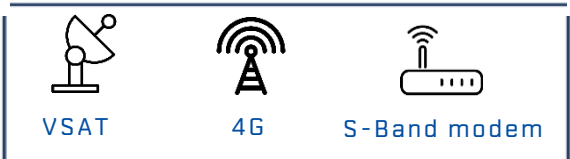
ENVIRONMENTAL PERCEPTION SENSORS



ONBOARD



COMMUNICATION PROTOCOL & BROADCAST



SHORE CENTER



SIREHNA

5, rue de l'Halbrane F-44340 Bouguenais
Tel.: +33 (0)2 44 76 57 57
www.sirehna.com / sales@sirehna.com



Technocampus site in
Bouguenais

Certified
management system

