

EXCELLENCE IN CONTROL

# AUTO-X

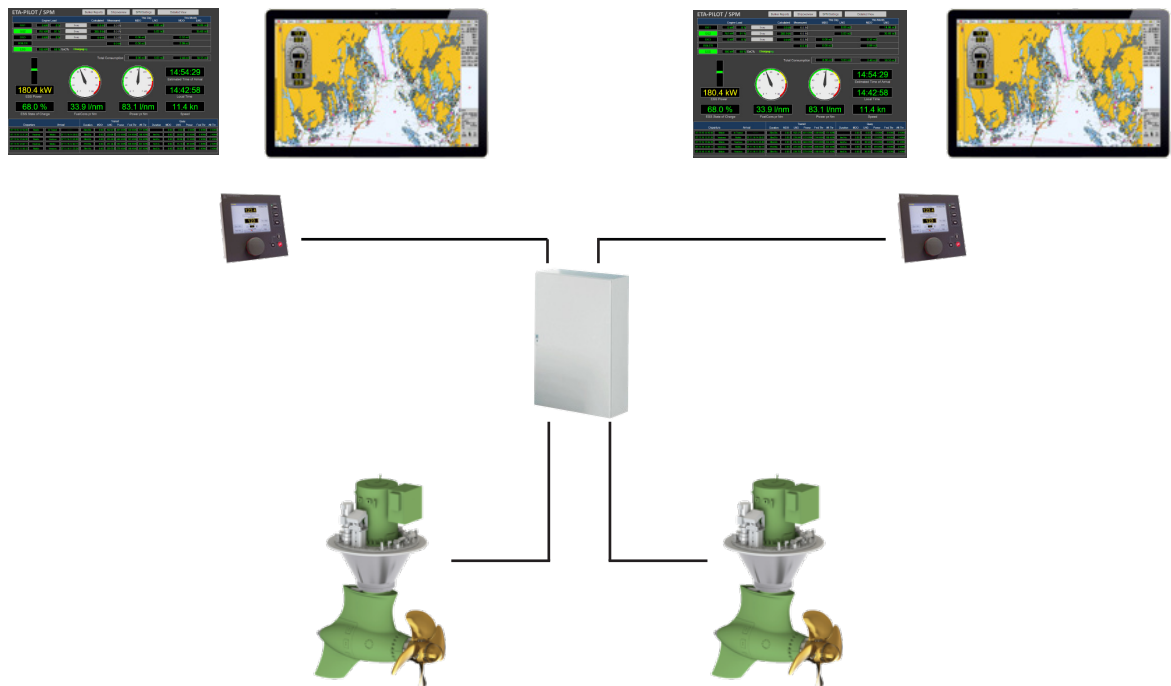
AUTOMATIC CROSSING SYSTEM



norwegian  
control systems

## FUNCTION OVERVIEW:

- The Auto-X is a system to help operate your ship in the most economical way following a track
- It will follow optimized acceleration and retardation curves and automatically minimize the energy consumption by controlling the propeller speed and power
- Auto-X is a separate control system, where the SW modules run on a separate controller and the I/O is connected directly to the controller
- The controller shares network and operator stations with IAS, but all control functions are independent
- The system controls speed and power values in accordance with a pre-programmed route plan (a nominal speed profile and coordinates), automatically adjusting leg-speeds to meet your set arrival time
- Acceleration and retardation is optimized for the propeller and the vessel, crossing speed is adjusted to ensure that the energy consumption is held as low as possible



One of the main advantages of Auto-X is that we are using the ECDIS monitor for setting and activating the route. You will have the same user interface as for normal ECDIS operations. The system enables the vessel to keep on the plotted route automatically. Area data for possible danger as well as important warning for navigation is registered in the system.

In Economy Mode, the intelligent adaptivity analyses the yawing movements of the vessel. Periodic movement will be identified and the controller reduces its sensitivity to such movements. Subsequently, less rudder action is required, which leads to lower levels of speed reduction and thus less energy consumption – automatically and continuously.

The Thruster Control System will optimize the combination of propeller RPM and propeller Pitch that gives the lowest fuel consumption at all vessel speeds and in all operating conditions.