SENSOR INTEGRATOR
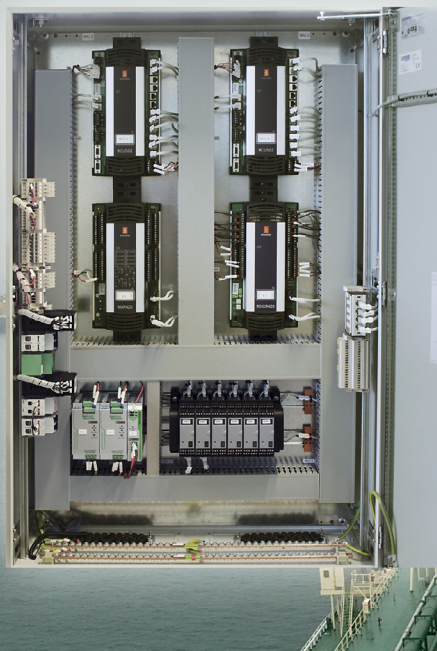

K-BRIDGE SENSOR INTEGRATOR (SINT) FOR NAVIGATION

The SINT unit provides a common interface between a vessel's navigation sensors and the Conning, Radar, ECDIS and Autopilot systems. All the navigation sensors are connected to the SINT, and the SINT distributes their input over a redundant LAN.

The practical benefit of this is that it reduces the amount of cabling required to connect up the components of the navigation system. The Conning system, for example, no longer needs dedicated cables to at least six sensors (more if secondary gyros and position reference systems are installed). Instead all cabling from Conning to the sensors is replaced by a redundant LAN connection.

The same is true of ECDIS and Radar: both receive sensor input over a redundant LAN connection from the SINT (instead of on multiple dedicated cable connections to the sensors).

The SINT can also communicate with the Dynamic Positioning and vessel automation systems if required.

Because of its critical role as the hub for all sensor input, the SINT has an advanced redundant design. Its functions are executed in parallel by two high-performance computers. Both have their own input connections to each sensor and they operate in a master-slave relationship. The master transmits sensor input on to the redundant LAN, and the slave mirrors the master's activities and takes over from it (with no loss of service) if the master fails.

To meet Safe Return to Port requirements, it is possible to install two SINT units in separate fire zones.

FEATURES

- Reduces cabling between the navigation sensors and the vessel systems that require sensor input.
- Distributes sensor input over a redundant LAN.
- 16 (optionally 20 or 24) bi-directional serial line channels (RS422, IEC 61162-1/-2) available for connection to sensors.

- 32 configurable digital I/O channels.
- 32 configurable digital/analog I/O channels.
- Advanced redundant design.
- Host for K-Bridge Autopilot and BNWAS.

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Input voltage:	115/230 VAC +/- 10%
Frequency:	50 to 60 Hz
Power consumption	
typical:	200 W
maximum:	570 W
Loop power consumption	
typical:	80 W
maximum:	340 W

CABINET SPECIFICATIONS

Material:	Steel
Protection standard:	IP44
Colour:	Grey, RAL7035

Dimensions:

Height	Width	Depth	Weight
1200 mm	800 mm	300 mm	85 kg

ENVIRONMENTAL SPECIFICATIONS

Ambient temperature	
operational:	-15 °C to +55 °C
storage:	-25 °C to +70 °C
Ambient humidity	
operational:	up to 100% relative humidity
storage:	up to 100% relative humidity
Heat dissipation:	
maximum	230 W
typical	120 W
Acoustic Noise:	< 45 Db

Specifications subject to change without any further notice.