### **AlphaMINDS** Conning

### ALPHATRON Marine

Software suite



- Monitoring and controlling of equipment onboard
- Based on in-house developed automation and connecting platform Lynx
- Custom built as preferred by owner
- Available in hardware and software bundle





**Category** All vessel types

Yachting



Workboats



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### Features

Our new Conning software is the first member of applications of our powerful all-in-one software suite AlphaMINDS (Multifunctional Information Navigation & Docking System). The conning application can be an integrated part of a JRC navigation system for advanced new build or retrofit projects or used as standalone system next to existing equipment. A large number of standard available protocols like NMEA 0183, Modbus, RS422/RS485 and ethernet are included.

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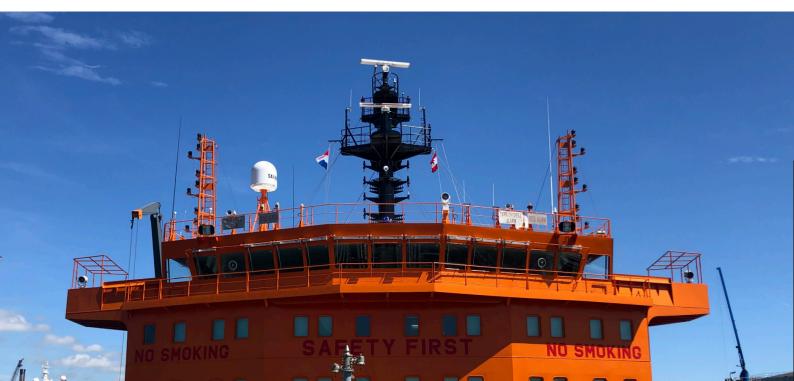
- Heading repeater
- Pitch, roll & heave indication
- Rudder angle repeater
- Speed indication

- Rate-of-Turn repeater
- Meteo overview
- Propellor revolution indication
- Indication of maneuvering devices

# Based on Lynx



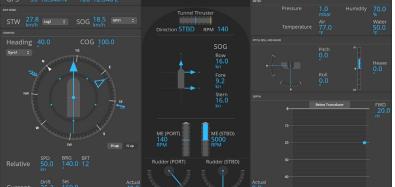
The software of AlphaMINDS and thus the Conning, is based on our in-house developed automation and connecting platform Lynx, specific designed as maritime SCADA software for monitoring and controlling all kinds of equipment onboard a vessel. Integrated in Lynx is the OpenBridge design guideline that will give a better user experience with regards to design, styling and easy recognition of indicators, messages, alarms of the graphical user interface (GUI). Consistency across systems is an essential aspect for reducing human errors and this will contribute to an improvement of the quality of ship bridges, the work environment for seafarers and overall ship safety.



## Screen modes

The Conning screen contains all standard presentations for displaying the usual information needed for safe navigation of a vessel. The standard conning application is divided into screens with tabs available in day, dusk or night theme that give the user a complete overview of the most important information at the time it is most relevant.

	<ul> <li>Navigation tab</li> <li>No.1 GPS</li> <li>No.2 GPS</li> <li>Compass (Gyro/MAG/GPS)</li> <li>Speed log</li> <li>Echo Sounder</li> <li>Anemometer</li> <li>Anemometer</li> <li>Current</li> <li>Meteo information</li> <li>Auto Pilot</li> <li>Rudder</li> <li>Engine/Propelle</li> <li>Bow thruster</li> </ul>	<ul> <li>Course over ground (COG)</li> <li>Same as No.1 GPS</li> <li>True heading/ Rate of turn (ROT)</li> <li>Speed through water (STW)</li> <li>Depth</li> <li>Wind speed &amp; direction</li> <li>Drift speed &amp; set</li> <li>Air temp/ pressure/ humidity</li> <li>Steering mode</li> <li>Heading (actual and set)</li> <li>ROT (actual and set)</li> <li>Angle</li> <li>RPM (and pitch)</li> <li>Direction &amp; Load or RPM</li> </ul>	
	<ul> <li>Docking tab</li> <li>No.1 GPS</li> <li>No.2 GPS</li> <li>Compass (Gyro/MAG/GPS)</li> <li>GPS Compass or other sensors</li> <li>Docking</li> <li>Speed log</li> <li>Echo Sounder</li> <li>Anemometer</li> <li>Current</li> <li>Rudder o Angle</li> <li>Engine/Propeller</li> <li>Bow thruster</li> </ul>	<ul> <li>Course over ground (COG)</li> <li>Same as No.1 GPS</li> <li>True heading/ Rate of turn (ROT)</li> <li>Pitch/ Roll/ Heave</li> <li>Bow, stern and longitudinal speed</li> <li>Speed through water (STW)</li> <li>Depth</li> <li>Wind speed/direction</li> <li>Drift speed &amp; set</li> <li>Angle</li> <li>RPM (and pitch)</li> <li>Direction &amp; Load or RPM</li> </ul>	
12:42:03 27-10-2021 35°16.346'N 120°12.346'E 27.8 ceat : SOG 18.5 ceat : ng 40.0 COG 100.0	ROT         0.00         1/7110         225         45         57.5         0           Tunnel Thruster         Tunnel Thruster         Therefore         1.0         Humidity         70.0           Direction STBD         RPM 140         SOG         To measure         1.0         Humidity         75.0	STW 27.8 Log1 C SOG 18.5 GPS1 C	Noveption Dataset     Orthogonal Dataset





## Customization

During the early design of our Lynx platform, a well-thought-out software architecture was developed. As a result, applications based on Lynx (such as conning) can be built in a very flexible way.

Even with the standard out-of-the-box Conning software, the user will have possibilities to set and customize some preferences like units, but also the range scales of presented data.



Tailor-made GUI with widgets (add-ons) can be designed to your needs, delivered, and implemented in a reasonable amount of time with the possibility to expand later if necessary.

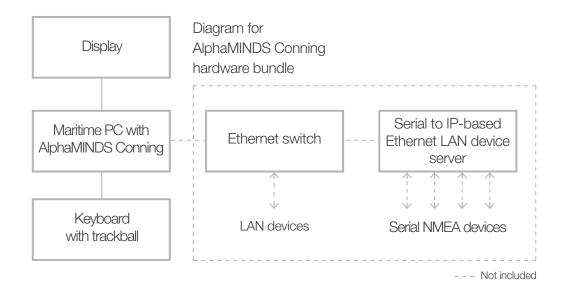
#### Units

- Ship speed kn, km/h, m/s
- Current Speed kn, km/h, m/s
- Wind Speed kn, km/h, m/s
- Depth m, ft, fm
- Propeller revolution rpm, min-1
- Propeller pitch angle %, °
- Thruster revolution rpm, min-1
- Thruster pitch angle %, °
- Air temperature °C, °F
- Water temperature °C, °F
- Air pressure hPa, mbar

- Range Scale
- Depth graph depth, time
- Rudder angle
  - Rate-of-Turn scale
  - Engine scale
  - Thruster scale

### System overview

We offer the AlphaMINDS Conning as a hardware and software bundle, a complete solution that provides what you need.



# Specifications

#### AlphaMINDS Conning bundle

This bundle consists of an IEC90645 certified marine computer with pre-installed AlphaMINDS Conning software and a secured dongle for running the application, without peripherals.

Software	AlphaMINDS Conning	
	Lynx Software license - Secured USB dongle	
Computer	Marine grade and fanless computer with multi power: 100-240VAC 50/60Hz + 24VDC	
Operating System	Pre-installed Windows 10 - 64Bit IoT version with latest updates or better	
Processor (CPU)	Intel® Celeron® 3955U or faster	
Memory	8 GB	
Storage	240 GB SSD	
Graphics card	Compatible with DirectX 12 or later with WDDM 2.0 driver, OpenGL 3.5 or better	
Certification	IEC 60945 4th (EN 60945:2002), IACS E10 EN55024 EN55022, Class A EU RO MR - Mutual Recognition ClassNK - Nippon Kaiji Kyokai, CCS - China Classification Society	

#### AlphaMINDS Conning software

Conning software to be used as part of an existing AlphaMINDS installation or as a stand-alone application.

Operating System	Windows 10 - 64Bit versions with latest updates or better	
Processor (CPU)	64-bit architecture, dual core or more	
System Memory	4 GB or higher	
Storage	4 GB free disc space	
Graphics card	Compatible with OpenGL 3.5 or better	
Certification	IEC 60945	

Display aspect ratio 1920x1200 pixel 16:10 (@ standard Conning, other aspect ratio's possible)

<sup>1</sup>Specifications are based on the minimum requirements of the application

In the box		Optional	
<ul> <li>AlphaMINDS Conning bundle</li> <li>Consist of:</li> <li>Standard Conning software</li> <li>Lynx Software license - Secured dongle</li> <li>Computer Intel 3955U 2.0GHz, 8GBRAM 240GBSSD WIN10</li> <li>Keyboard with backlit &amp; 25mm trackerball</li> </ul>	G-009390 G-009374 G-007680 G-008059 G-008141	<ul> <li>AlphaMINDS - Standard Conning software</li> <li>Lynx Software license - Secured dongle</li> </ul>	G-009374 G-007680





### www.jrc-world.com

### Centers of Excellence

JRC (Japan Radio Co.,Ltd) 1-7-32 Tatsumi, Koto-ku Tokyo 135-0053 Japan +81 3 5534 7800

JRC/Alphatron Marine B.V. Schaardijk 23 3063 NH Rotterdam The Netherlands +31 10 453 4000 JRC Shanghai Co.,Ltd. Floor 9-A Building C2 Shanghai International Trade Center 1599 New Jinqiao Road Pudong, Shanghai, China 201206 +86 21 2024 0607

JRC South East Asia 59 S, Tuas South Avenue Ho Lee Industrial Development 637418 Singapore Singapore +65 6863 0335 JRC/ProNav AS Hovlandsveien 52 4374 Egersund Norway +47 5146 4300

JRC Americas 1205 Butler Road TX 77573 Houston United States of America +1 281 271 4600