

# NautoPlex Series

Advanced Data Collector and Distributor for Navigation and Bridge Systems



# NautoPlex

NautoPlex is the perfect navigational data manager within all bridge systems solutions.

Wherever there is a need to manage navigational data the new NautoPlex will support you to provide your system with interface data in the appropriate format and compliant to the relevant standard.

NautoPlex 8 is an intelligent eight channel multiplexer / serial data router for NMEA, IEC61162-1/-2 and LAN data and a real sophisticated solution for the maritime market. It provides eight RS422 in- and output channels. All interface parameters are easily adjustable. The baud rate can be configured for each channel independently. All data from ports can be routed to a different port not only port wise additionally telegram wise. In addition the NautoPlex 8plus8 provides eight digital I/O ports for pulse, alarm or status information handling.

NautoPlex provides an internal buffer to avoid loss of data. Filters can be set independently for each channel to protect connected equipment regarding data overflow or to downgrade a high transmission rate.

NautoPlex monitors the availability of the incoming data. An automatic switching over functionality to the same type of data but from a different port can be activated. This keeps a data consumer satisfied with certain type of data if still available on another port.

The outstanding feature is that upper described functionality is not limited to a single NautoPlex installation. The routing, filtering, distribution overall is also possible using two or more NautoPlex in a network.

NautoPlex is preconfigured for default applications but can be easily be adapted via a PC based configuration tool. The configuration can be generated offline and later downloaded or it can be copied from one NautoPlex to another.



## BENEFITS AT A GLANCE

- Easy and quick to install serial to ethernet data input & output
- Multitude of functions, easy configuration
- Free selection of installation place as external data collector
- Reduced cabling and termination cost
- Simplified project engineering and commissioning
- High flexibility to adapt to any system layouts
- Made in Germany, type-approved in accordance with IEC60945

## AVAILABLE IN FOUR DIFFERENT VERSIONS (INCL. LWE VERSIONS)

- NautoPlex 8
- NautoPlex 8plus8
- NautoPlex 8 LWE
- NautoPlex 8plus8 LWE

NautoPlex is a compact device to convert RS422/RS485 serial data to LAN. Sophisticated functionality enables a wide range of configurations and additional functions. In addition, NautoPlex 8plus8 provides eight separate digital in- and outputs (status input / output contacts).

NautoPlex is also available in LWE version (Light Weight Ethernet acc. IEC61162-450).



## NAUTOPLEX 8 AND NAUTOPLEX 8PLUS8 CAN BE USED FOR THE MOST VARIED PURPOSES

**Buffer:** NautoPlex is able to buffer data to prevent data overflow on interfaces (LAN and serial)

**Splitter:** NautoPlex is able to route data from one interface to different selected other interfaces (LAN and serial).

**Distributor:** NautoPlex is able to distribute selected data to different selected interfaces (LAN and serial).

**Booster:** NautoPlex is able to duplicate interfaces (one to several)

**Multiplexer:** NautoPlex is able to merge interface data from different interface to one interface (LAN and serial).

**Converter:** NautoPlex is able to convert data from serial line, digital I/O and to LAN and vice versa.

Conversion to customer needs regarding:

- Obsolete NMEA format to current IEC61162 format
- New checksum algorithm
- Transmission speed (Baud rate 1200 to 11500 Baud)
- Pulse-Log to serial or LAN
- Digital alarm status to serial ALR or ACK and vice versa

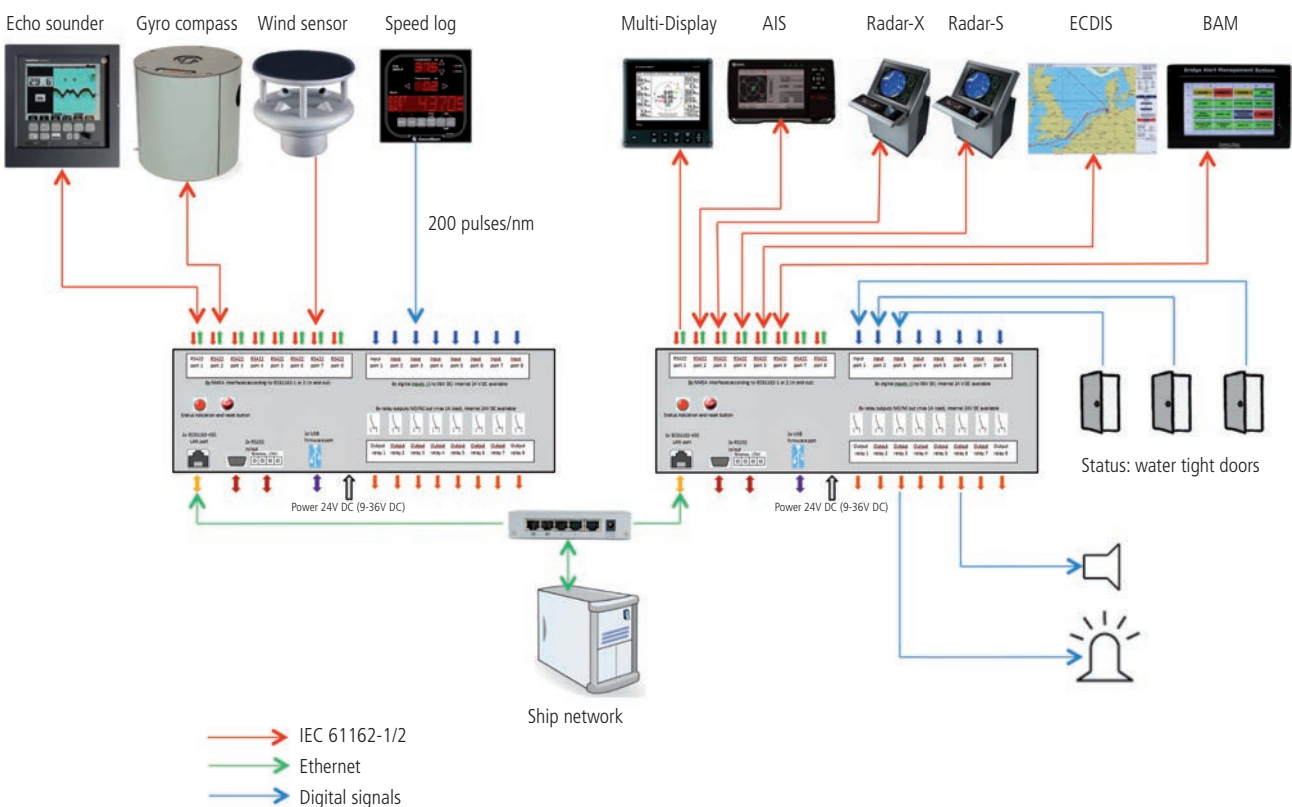
**Filter:** NautoPlex is able to filter defined data to prevent interface or equipment overload (LAN and serial).

**Data manager:** NautoPlex is able to provide data degradation management. In case e.g. GPS information is provided on more than one interface and the selected GPS interface fails, NautoPlex provides the option to automatically switch over to the next defined and available GPS information. NautoPlex is able to manage this degradation as well when the different GPS information are provided on a 2 or more NautoPlex data distribution. Synchronization takes place via LAN.

**Recorder:** Up to a certain limit NautoPlex is able to record data for offline investigation and service (LAN and serial).

**Digital I/O:** NautoPlex 8plus8 is able to convert pulses (speed information) into serial data.

**Status/alarm converter:** NautoPlex 8plus8 is able to provide status/alarm input/output according to customer needs.



# TECHNICAL DATA

## Supply voltage

- 24V DC (9 – 36 V DC) / 2 W

## In-/outputs

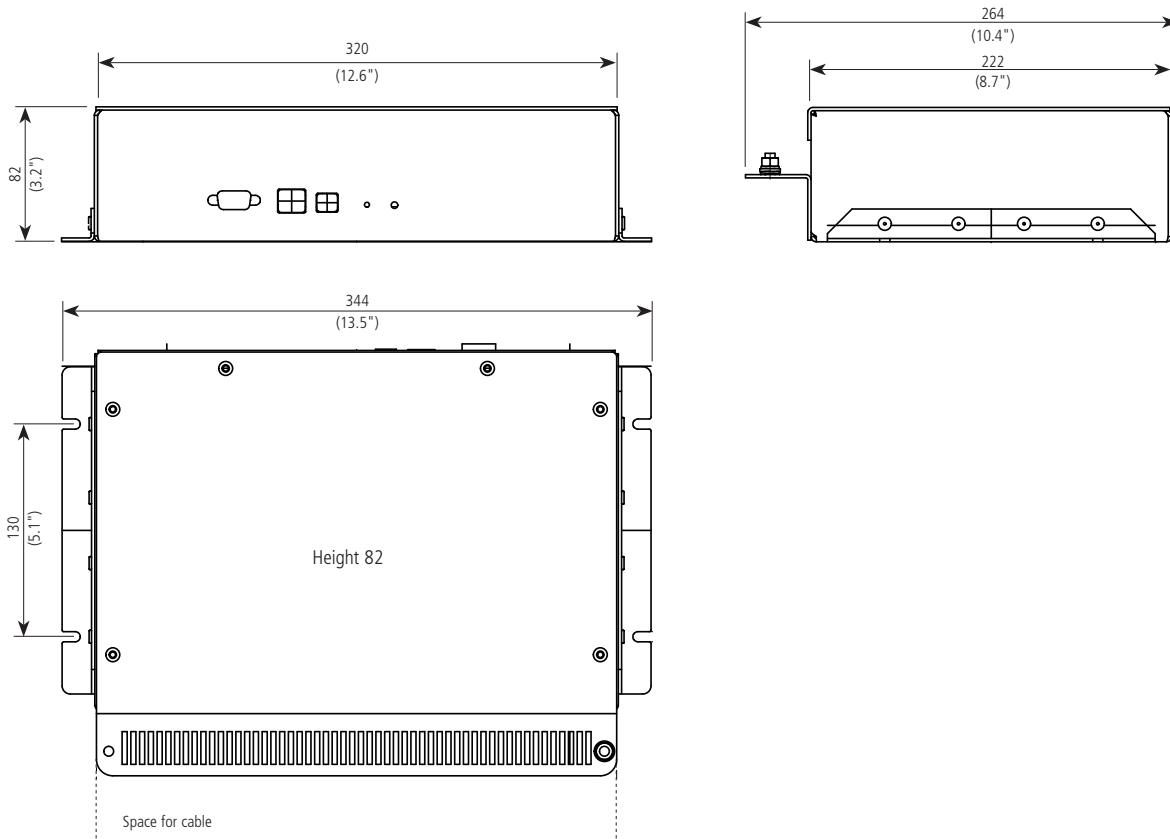
- **8x serial** interfaces (inputs and outputs)  
according to IEC61162-1/2,  
RS422, adjustable between 1.200 to 115.200 baud,  
short circuit proof, terminals for up to 2,5qmm wires
- **8x digital** interfaces (8 inputs and 8 outputs)  
galvanic isolated, input voltage (9 to 30V DC external voltage or 24V  
DC internal), adjustable, for each input. output: relay contacts  
(NO/NC), max. load 1A/contact.  
(only NautoPlex 8plus8)
- **1x LAN** interface (RJ45)  
(LWE-versions acc. to IEC61162-450)  
10 MBit/s to 100 MBit/s. (UDP / TCP/IP client and server)


## Full type approved

- BSH approval-no.: BSH/4542/001/0042823/14
- incl.: IEC60945

## Weight

- 2,0 kg / 2,2 kg (Nautoplex 8 / Nautoplex 8plus8)



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**Raytheon Anschutz GmbH**  
Headquarters  
D-24100 Kiel, Germany  
Tel +49(0)431-3019-0  
Fax +49(0)431-3019-291  
www.raytheon-anschutz.com