

## Anschütz autopilot

# NautoPilot 5000 NX



# Where highest precision meets efficiency

## NautoPilot 5000 NX

NautoPilot 5000 NX continues the series of Anschütz autopilots and combines unique algorithms for precise steering performance with the widest range of fuel saving features.

### Key Benefits



#### High precision in all modes

NautoPilot 5000 NX uses proven steering algorithms that are well recognized for precise steering performance and reliability.

- Heading control mode, and in addition course control and track control modes
- In course control mode the autopilot compensates drift deviations automatically
- Approved as part of a track control system in combination with ECDIS NX.



#### Safe steering in any situation

Crews can rely on intuitive operation and full fingertip control – even in dangerous situations.

- Clear presentation of all navigational information on a 7" graphical touch display
- User adjustable limits for permanent sensor and performance monitoring
- Clear mode indication for operational safety, e.g. in override situations (with NautoSteer AS)

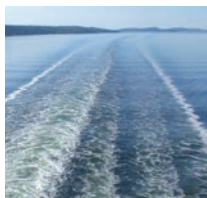


#### Long time secure investment

Best choice today, ready for the future: NautoPilot 5000 NX strictly follows current and future standards.

- Long product lifecycle, future-proof hardware
- Support of standardized bridge alert management
- Support of standardized Ethernet communication according to IEC 61162-450 (most installations will use Ethernet in future)
- Global service network in case you need help

Learn  
more



#### Advanced steering with NautoPilot 5000 NX

Visit the website to learn more about outstanding features of NautoPilot 5000 NX and about integration into NautoSteer AS and third-party steering gear control systems:

[www.raytheon-anschuetz.com/nautopilot-5000nx/](http://www.raytheon-anschuetz.com/nautopilot-5000nx/)

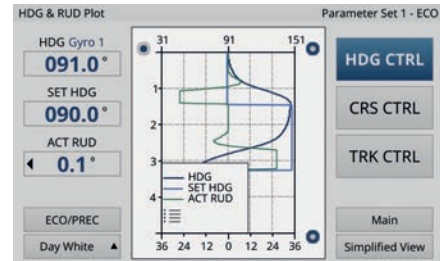
# Fuel-saving

Years of experience in the field have shown that our autopilots help to save significantly on fuel. We know that speed and rudder movements, weather conditions such as currents or sea states, and the characteristics and condition of the ship all have an influence. NautoPilot 5000 NX offers four functions that alone or in combination help to reduce fuel consumption.

- AS** Optimal **A**utopilot **S**ettings → Fuel-saving due to optimized autopilot settings
- RA** Less **R**udder **A**ctivity → Fuel-saving by reducing rudder activity
- SD** Shortest **D**istance → Fuel-saving by sailing the shortest distance

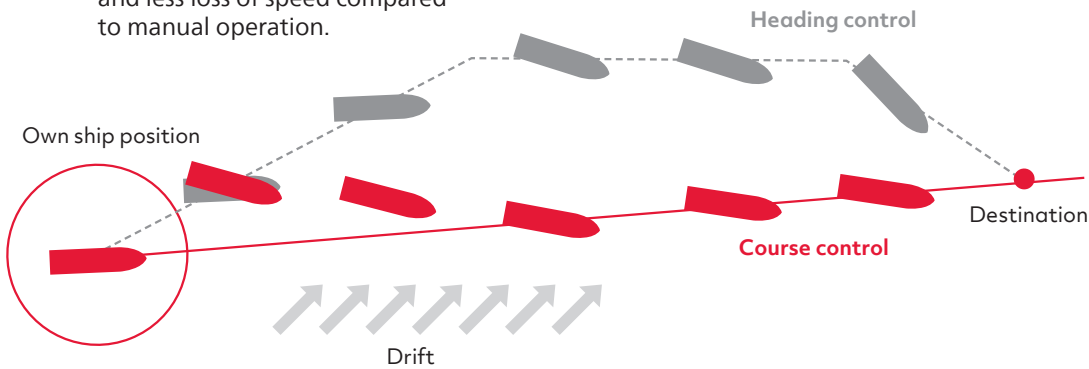
## Heading & Rudder Plot **AS RA**

Rudder activity increases fuel consumption and costs. The Heading & Rudder Plot provides an instant overview about heading, set heading and rudder activity. This transparency allows the bridge team to monitor steering performance and adjust autopilot settings in order to minimize rudder activity.



## Course control **SD**

NautoPilot 5000 NX steers the vessel on a course-over-ground line and automatically compensates for drift deviations. This has an effect on fuel consumption: the travelled distance between two points is reduced to a minimum automatically. Continuous heading adjustments lead to smaller rudder angles and less loss of speed compared to manual operation.

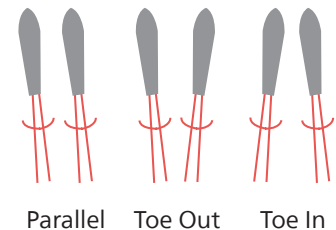


## ECONomy mode (adaptive mode) **RA**

The ECO mode makes the NautoPilot 5000 NX smart. The autopilot permanently monitors the actual yawing movements of the vessel, depending on load and sea conditions. Symmetrical movements as well as movements that do not need to be corrected due to the inertial behavior of the ship are filtered out and not corrected by the autopilot. The result: permanent fuel savings through less rudder activity at the push of a button.

## Toe Angle for dual rudder vessels **AS**

With Toe Angle, NautoPilot 5000 NX provides fuel saving for dual rudder vessels. The steering characteristics and energy efficiency are optimized with an offset (toe angle) of the rudders to each other. Test runs with real installations have proven significant fuel savings of up to 2.5% when the toe angle is set optimally considering speed and draught.



## Supply voltage & power consumption

- 24 V DC (18-36 V DC)
- Approx. 25 W

## Signal inputs

- Heading (gyro, sat): THS, HDT, Course Bus
- Heading (magnetic): HDG, THS, HDT, HDM, Magnetic Sonde, Course Bus
- Speed: VHW, VBW, VTG
- Position: GGA, GLL, RMC, GNS
- ECDIS according to IEC 62065 (track control system)
- NMEA telegram APB (NAV control mode for NautoPilot 5100 NX and NautoPilot 5300 NX – not for use on SOLAS vessels)

## Signal outputs

- VDR connection: HTD, RSA, PANZRSA, PANZSTA

## Ethernet interface

- 2 Ethernet interfaces in teaming mode (acc. to IEC 61162-450)

## Control of steering gear

- 2 switching outputs (24V DC – 110V DC, max. 48 W)
- 2 analog outputs (+/- 10 V DC, max. 5 mA, or 4–20 mA)

## Actual rudder from steering gear

+/-10V, 4-20mA, potentiometer

## Status/alerts

- Off-heading
- Heading monitor
- Steering failure
- System failure
- Autopilot on
- Alert communication acc. to IEC 62923-1/-2

## Temperature range

- Operation: -15°C to +55°C
- Storage: -40°C to +70°C

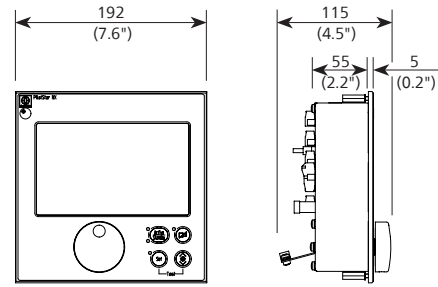
## Type approved as

- Heading control system
- Heading control system for high-speed craft
- Part of a track control system

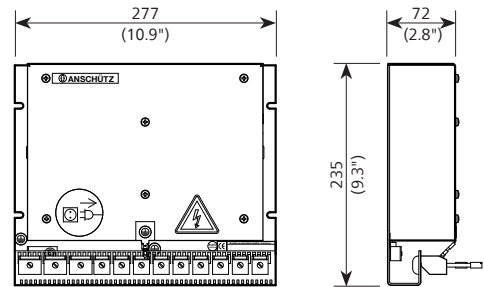
## Type of enclosure acc. to IEC 60529

- NautoPilot 5000 NX operator unit: IP23 / IP56 (front side)
- Autopilot NX interface unit: IP12

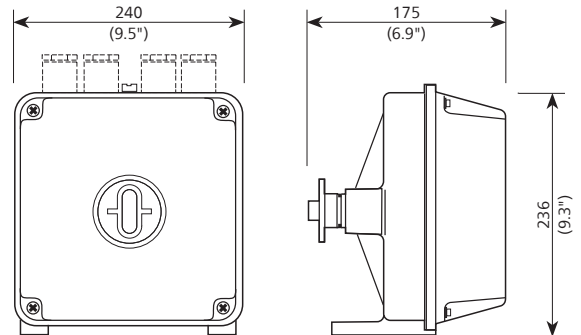
## NautoPilot 5000 NX operator unit 1.5 kg



## Autopilot NX interface unit 3 kg



## Feedback unit 4 kg



## Three different NautoPilot 5000 NX autopilot licenses

**NautoPilot 5100NX:** Heading control

**NautoPilot 5300NX:** Heading control  
Course control  
Weather adaptivity (ECO)

**NautoPilot 5400NX:** Heading control  
Course control  
Weather adaptivity (ECO)  
Track control category C

**NautoPilot 5000 NX is easy to integrate** in newbuilds, refits, and third-party steering gear control systems.