

Anschütz gyro compass

# Standard 22 NX

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# The world's most popular gyro compass **Standard 22 NX**

Standard 22 NX is the new Anschütz gyro compass, designed for high accuracy, reliability and operational safety even under harshest environmental conditions and in high latitudes.

## Key Benefits



### The upmost in reliability

Standard 22 NX uses unique and superior sensor technology, proven over 15 years in more than 20,000 installations.

- Inductive and optical data transmission, no slip rings that are subject to wear
- Unique resistant design reduces environmental influence (i.e. shocks, vibrations)
- Reliability and best accuracy of heading information under any environmental condition, proven many times even in high latitudes



### Servicing made dead easy

Standard 22 NX is much easier to install and maintain, and provides multiple interfaces for serial data communication, Ethernet and Bridge Alert Management.

- Standard 22 NX is installed by use of standard cabling (redundant CAN bus), less wiring effort
- Webserver functionality for configuration, software update and diagnosis – no need of proprietary tools
- Configuration in two minutes possible by upload of a configuration file



### Long time secure investment

With an unsurpassed price-performance ratio over lifetime, Standard 22 NX offers best value for money in newbuilding and retrofit projects.

- Unsurpassed price / performance ratio (low initial price)
- Long-term stability of heading performance (rock solid technology)
- Low lifecycle cost because of long maintenance intervals (18-24 months) and long lifetime of gyrosphere
- Approved as gyro compass, gyro compass for high speed craft and rate-of-turn indicator



  
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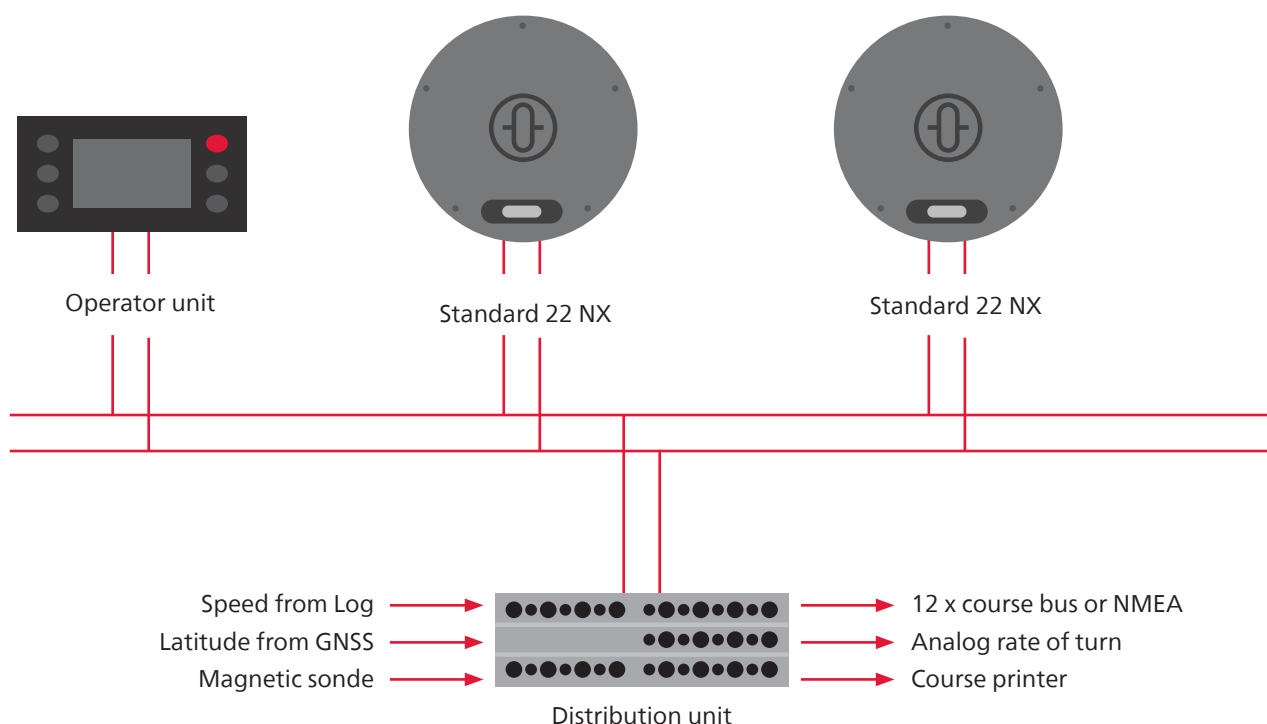
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## Heading management systems

In a heading management system, up to three Standard 22 NX or any combination with Standard 30 MF can be connected plus an additional magnetic compass – where required also with full redundancy in distribution

(compliant to demanding class notations such as DNV NAUT-OSV/OC/AW, LR IBS or ABS NIBS). Heading management systems not only add safety but also additional features that make the day-to-day work easier.



## Main Features

### Highest operational safety under harshest environmental conditions

- Integration of up to four sensors, including third-party compasses (up to three gyro compasses, or two gyros and a GNSS THD, and a magnetic compass)
- CAN bus based real time network with up to 400m cable length
- Heading monitor, with manual or automatic switch over of gyro compasses
- Automatic correction of magnetic heading by deviation and variation (with appropriate GNSS receiver)
- Quick settling mode reduces settling time to one hour

## Gyro compass retrofit

We provide retrofit solutions for Anschütz gyro compasses but also all other brands. It is possible to replace only parts of a compass system or to integrate existing magnetic and gyro compasses to renew an existing compass system cost effectively step by step. The existing periphery can be used further on and thus the investment volume can be kept within a reasonable range.



Visit our website for Gyro Compass Retrofit and learn more about how we can offer you the perfect technical solution.

[www.raytheon-anschuetz.com/gyro-compass-refit](http://www.raytheon-anschuetz.com/gyro-compass-refit)

# Technical Data



## Accuracy

- Settle point error 0.1°secLat., RMS
- Static error 0.1°secLat., RMS
- Dynamic error 0.4°secLat., RMS (periodic roll and pitch+horizontal acceleration) secLat.=1/cosLatitude
- Rate of turn 0.5°/min plus 5% of the indicated rate of turn

## Supply voltage & power consumption

- 24 V DC (18 – 36 V DC)
- 80 W to 140 W (start-up) sensor unit
- 36 W distribution unit / 6 W operator unit / 7 W per analogue repeater

## General data

Permissible ambient temperature

- Operation –10° C to +55° C
- Storage –25° C to +70° C without liquids
- Settling time 1h (< 3°) with «Quick settling»
- Max. rate of follow-up 100 °/s
- Permissible periodic roll and pitch angle ±45°

## Signal inputs

3 serial inputs for

- Position: GLL, GGA, RMC, GNS
- Speed: VBW, VHW, VTG, 200 pulses/NM
- Alert communication (BAM)

2 Ethernet interfaces (teaming mode)

## Signal outputs

4 serial outputs for

- Heading: THS, HDT, Course Bus
- Rate-of-turn: ROT
- Alert Communication (BAM)

1 analog output +/-10V DC for rate-of-turn for 30°/min, 100°/min or 300°/min

2 Ethernet interfaces (teaming mode)

With distribution unit additionally

- 12x RS 422 individually configurable as Course Bus or NMEA
- 1x RS 232C for course printer
- 1 analog output +/-10V DC for rate-of-turn for 30°/min, 100°/min or 300°/min

## Alerts

- System failure with potential-free relais contact
- ALR/ACK NMEA alert communication (acc. to IEC61162-1)
- Bridge Alert Management communication (acc. to IEC62923-1 and -2)

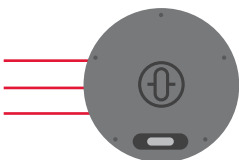
## Weight

- Master compass 17.5 kg
- Distribution unit 7.5 kg
- Operator unit 1.5 kg

## Type of enclosure acc. to IEC/EN 60529

- Gyro compass IP 22
- Operator unit IP 23/IP 56 front sided
- Distribution unit IP 22

Sensors:  
Speed from Log  
Latitude from GNSS  
Alert ACK from CAM



Standard 22 NX

Course Bus / NMEA (Heading/ROT)  
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Course Bus / NMEA (Heading/ROT)  
Sensor specific alerts to CAM  
Analog rate of turn  
Ethernet (Sensor/alert data in/out)  
Ethernet (Sensor/alert data in/out)

## Learn more



Steering repeater



Bearing repeater



Digital repeater



## Modular Anschutz gyro compass portfolio

Visit the website to learn more about our of modular range of gyro compasses, typical system configurations and related accessories such as repeaters.

[www.raytheon-anschuetz.com/gyro-compasses](http://www.raytheon-anschuetz.com/gyro-compasses)