

# Sperry Marine

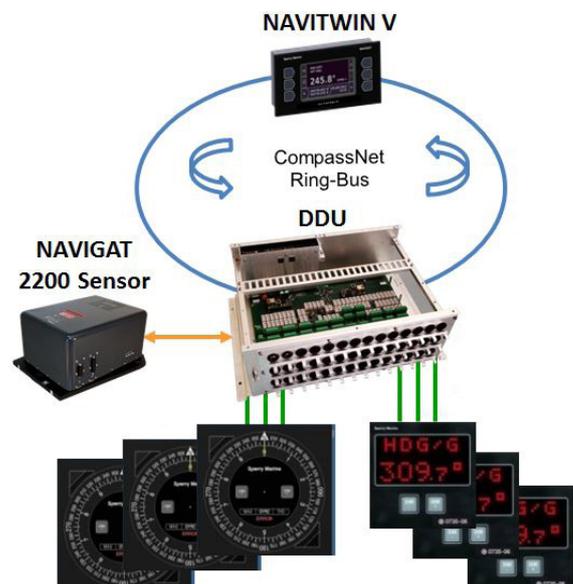
## NAVIGAT 2200



The cost effective fibre-optic gyrocompass solution

### Features

- High Dynamic Accuracy
- Maintenance Free
- Fast settling time of 20 minutes
- MTBF 100,000 hours
- Type approved for HSC and INS
- Type approved rate-of-turn output
- Roll, Pitch and x/y/z-rate outputs
- Solid-state, fully electronic strap-down technology
- Compact size and low weight
- Reliable state of the art fibre-optic technology
- Not controlled under EU Dual-Use regulations



# NAVIGAT 2200 Fibre-Optic Heading and Attitude Reference System

The NAVIGAT 2200 is the latest addition to Northrop Grumman Sperry Marine's successful gyrocompass portfolio. Fully integrated into CompassNet as a single or multi-compass solution, it incorporates all the benefits of the ring-bus system, including simplified cabling, rapid installation, enhanced system flexibility, increased redundancy and hot plug-and-play.

With an ultra-fast settling time, better than Hemispherical Resonator Gyros (HRGs), an industry leading Mean Time Between Failure (MTBF) comparable to HRGs, not controlled under EU Dual Use regulations which is unique in the market for strap-down systems, and a cost-effective price, the NAVIGAT 2200 is the ideal solution for any vessel - especially those with dynamic positioning (DP) systems.

Based on the proven FOG technology with reliability of over 130.000 MTBF in the field for the well-known NAVIGAT 3000, and extensively tested on several vessels, the NAVIGAT 2200 is also fully type approved for High Speed Craft (HSC) and Integrated Navigation Systems (INS).

## Technical Data

### Accuracy

Heading	0.75 sec(Lat) RMS
Rate-of-Turn, x/y-Rate	1000 ppm (0,1 %) RMS
Roll & Pitch	0.5 RMS

### Power Supply

Power supply	2x 24V DC (main and back-up)
Power consumption	20 W

### Operational Characteristics

Operational Range	78 latitude
Velocity	70 knot
Roll & Pitch	60
Angular Rates	20 / sec.
Acceleration	10m / sec.

### Alignment

Dynamic conditions at sea	<= 20 min.
Stored Alignment, static	ca. 6 min. (latitude < 78 )

### Environmental

Protection Grade	IP 23 (IEC/EN 60529)
Ambient Temperature	-15 C to +55 C / 5 F to 131 F
Storage Temperature	-25 C to +75 C / -31 F to 158 F
Requirements / EMC	Acc. IEC 60945 / .DO-160

### Compliance and Approvals

IMO Res. A.424(XI), A.694(17), MSC.191(79), ISO 8728 (2014),

IEC 60945 (2002) incl. corr. 1 (2008), IEC 62288 (2014),

IEC 61162-1 (2010), IEC 61162-2 (2009)

### Interfaces\*

#### Serial Interfaces according IEC 61162:

19x sensor data output, 8x with 24V DC power out
1x Printer output or sensor data output
8x serial data input (2x GNSS, 2x Speed Log, 1x Rudder angle, 1x Set Heading, 2x spare)
1x Bi-directional alarm communication acc. IEC 61924-2

#### Analogue Interfaces:

1x 10V Rate-of-Turn output
1x Fluxgate input, incl. Fluxgate power supply

#### Alarm / Status Interfaces (digital):

11x Alarm output
7x Status output (G1-G4, M active, GAS active, Mute out)
4x Status input (Auto/Man, 180 Offset, Mute in, Spare)

\*Interfaces connected to DDU, see CompassNet Brochure

#### Dimensions, Weight and MTBF

Width	292 mm
Length	340 mm
Height	170 mm
Weight	ca. 9.1 kg
MTBF	100,000 hours

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