

NAVIGAT X MK 2
Digital Gyrocompass System



Sperry Marine

NAVIGAT X MK 2 Digital Gyrocompass System

Overview

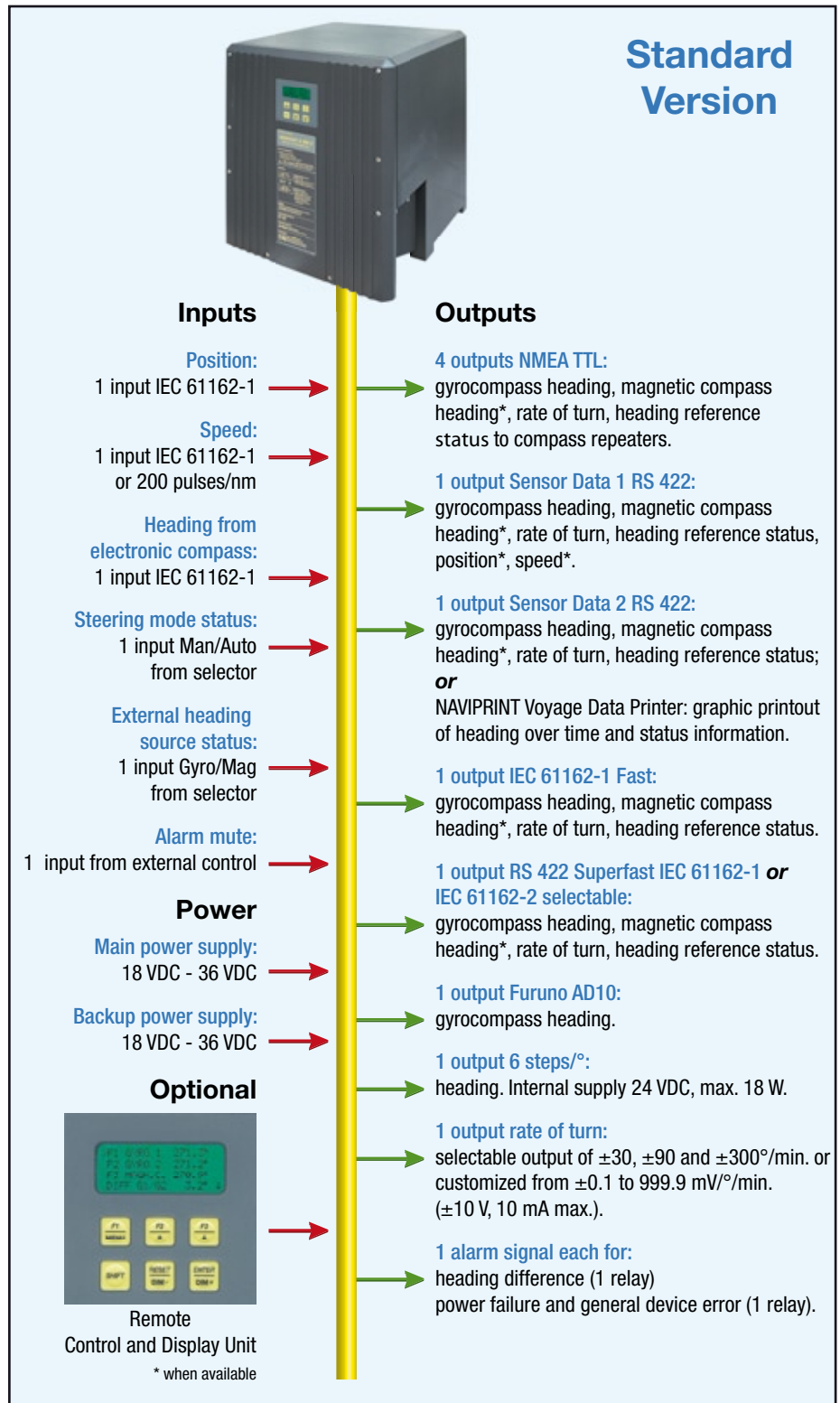
Sperry Marine is pleased to announce the introduction of its new-generation NAVIGAT X MK 2 digital gyrocompass system, which provides a cost-effective solution that satisfies international carriage requirements for a type-approved marine gyrocompass.

The NAVIGAT X MK 2 gyrocompass is a compact, one-unit design that runs on a 24-volt power supply with two independent DC inputs. It can drive up to four analogue repeaters and provides five additional serial data outputs and one six-steps/degree output. Based on the proven Sperry Marine NAVIGAT X MK 1 design, the new gyrocompass provides better than 40,000 hours mean time between failures. The system remains north-stabilized for up to three minutes in the event of a power interruption. The NAVIGAT X MK 2 complies with International Maritime Organization (IMO) regulations A.424(XI) and A.694(17) as well as the International Standards Organization (ISO) standard 8728, and is fully Wheelmark type-approved. The introduction of this new gyrocompass completes the Sperry Marine range of heading sensors, which now comprises the NAVIGAT 2100 fiber-optic gyrocompass, the NAVIGAT X MK 1 and the NAVIGAT X MK 2 digital gyrocompasses.

Main Features

- Performance in accordance with IMO A.424(XI), A.694(17), and ISO 8728.
- MED (Wheelmark) approval.
- Comprises one single unit.
- Power supply: two independent 24 VDC inputs.
- Control and display unit (not removable) in front cover with 4-digit heading display and 6 operating keys.
- Heading accuracy
 - Static <math>< 0.1^\circ</math> secant latitude
 - Dynamic <math>< 0.4^\circ</math> secant latitude
 - Settle point error <math>< 0.1^\circ</math> secant latitude
- Automatic static north speed error correction – no extra unit required.
- Rate-of-turn output.
- High speed transmission and follow-up system 100°/sec.
- Highly accurate heading data transmission by means of shaft encoder.
- Self-aligning repeater compasses with serial interface IEC-61162-1 / RS 422.
- Gyro system remains north-stabilized during power interruptions of up to three minutes.
- Twin rotors (19,000 rev./min.) and liquid damping system eliminate latitude error.
- $\pm 180^\circ$ electronic alignment error correction in setup program (mechanical correction is not necessary).

Standard Version



- High MTBF (40,000 hours).
- 18-month maintenance intervals.
- Monitoring and alarm functions for all voltages, gyroscope current and follow-up system.
- Short maintenance and repair times – low service costs.
- Permanent storage of operational data (gyrosphere current, temperature, elapsed operation time).
- Over 250 Sperry Marine service locations worldwide.

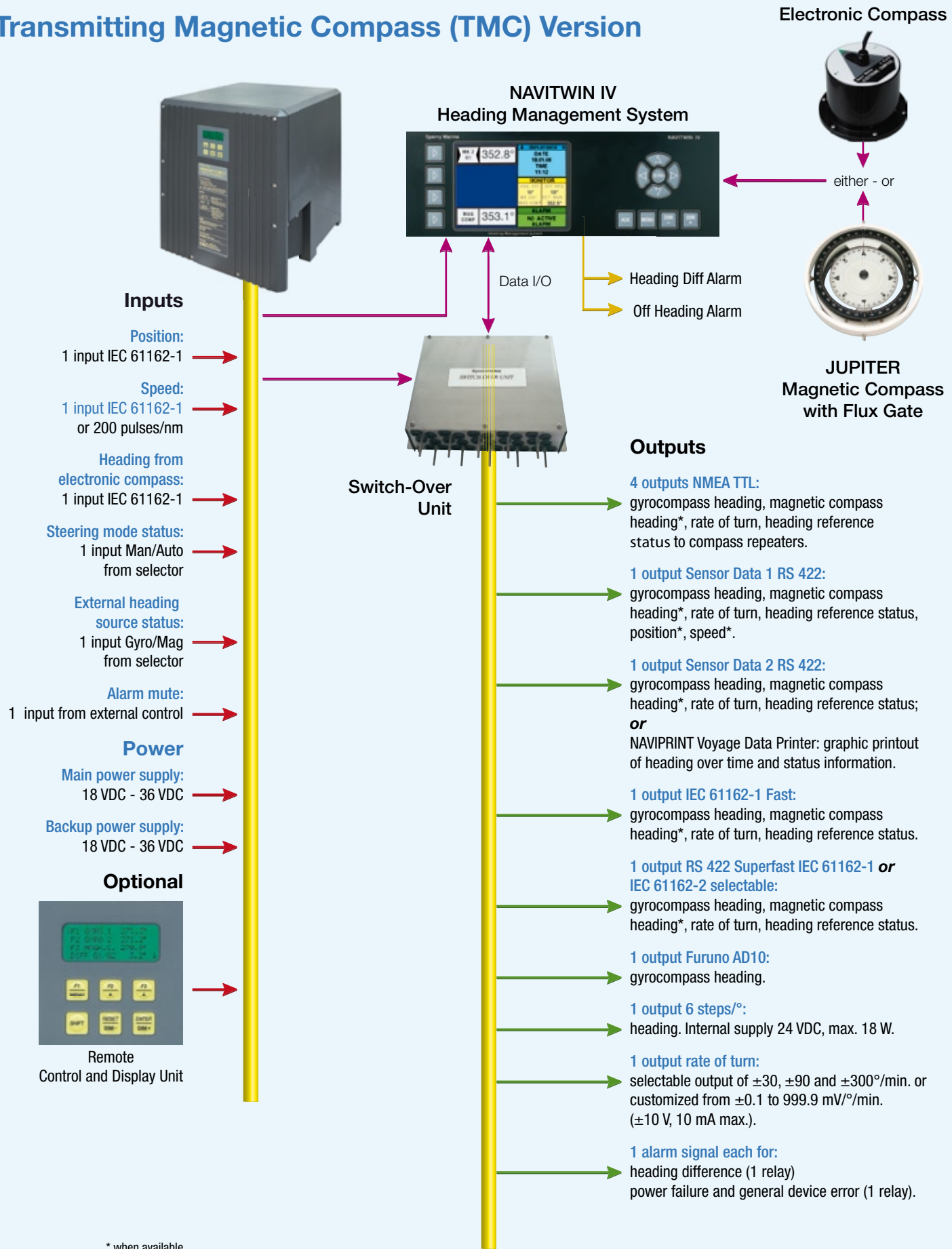
Power Consumption

Start-up	DC 80 W
Operation	DC 45 W
Each repeater (analogue)	8 W

Dimensions and Weight

Width	404 mm
Height	520 mm
Depth	420 mm
Weight	21 kg

Transmitting Magnetic Compass (TMC) Version



Accessory Equipment



Bearing repeater compass with 360° card in a stand with azimuth device PV 23
Total weight: 16.1 kg



Universal Digital Repeater
Weight: 1.0 kg with cable

Sperry Marine

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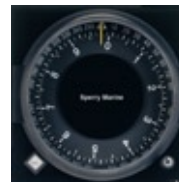
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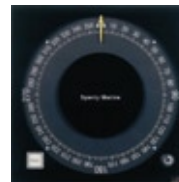
Fax: +44(0)-20 8329-2415



Bearing repeater compass with 360° card in a bulwark console
Weight: 10.3 kg



Steering repeater compass for console mounting with 360° and 10° compass cards
Weight: 1.5 kg



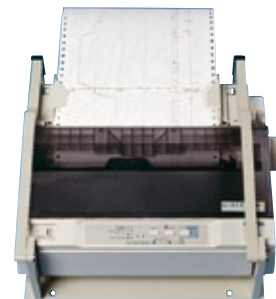
Console repeater compass with 360° card
Weight: 1.5 kg



Prismatic azimuth device PV 23
Weight: 1 kg



Bulkhead repeater compass with 360° card
Weight: 2.9 kg



NAVIPRINT
Navigation Data Printer
Weight: 8 kg

Sperry Marine, with worldwide headquarters in Charlottesville, VA, and major engineering and support offices in Melville, NY, New Malden, England, and Hamburg, Germany, is part of the Northrop Grumman **Electronic Systems** sector.

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Over 200 Locations Worldwide