TRANSMITTING HEADING DEVICES / GNSS COMPASS

MD203 GNSS COMPASS & POSITION SENSOR

SKU: F203002

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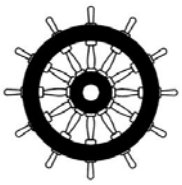
FEATURES

- **True heading anywhere on earth**
- **0.5º heading accuracy**
- **Heading accuracy unaffected by the latitude**
- **Heading available in periods of GNSS drop-outs**
- **Compliant to WAAS, EGNOS and MSAS Satellite Based Augmentation Systems**
- **Replaces several instruments with one robust, integrated product**
- **Only paired cable (no coax) between the mast unit and the equipment on the bridge**
- **20 Hz update rate on heading, rate of turn and position measurements (configurable)**
- **Output of data on Ethernet**
- **1PPS out synchronization signal**

CERTIFICATIONS



Wheel Mark 0575

MD203MFD - Required for Type Approved Systems

OVERVIEW

The MD203 GNSS Compass delivers heading and positioning information, and provides unparalleled continuous performance using Global Navigation Satellite Systems (GNSS). The robust, rugged housing is sealed for the harshest environments. It incorporates fixed and pole mounting capability for both marine and land applications. The MD203 supports both NMEA 0183 and NMEA 2000 protocols and the unit delivers accurate and continuous performance, including position, heading, heave, pitch, and roll. Integrated gyro and tilt sensors give fast start-up times and heading updates.
During periods of short satellite signal loss, the inertial sensor automatically takes over as the prime source for heading determination until the GNSS comes back on line.
The MD203 is capable of replacing several vessel instruments with one compact navigation tool. The stability and maintenance-free design replaces traditional gyrocompasses and stand-alone GPS units at a fraction of the cost.
Note: When used for type approved applications, the MD203 must be connected to the MD203MFD Multi Function Display via LAN.

APPLICATIONS

- Provides a source of NMEA 0183 Digital Heading Data to be used as a replacement, or alongside the Marine Data Transmitting Heading Device (THD) System; an alternative (or a backup) system to a gyrocompass as a source of Heading.

RELATED PRODUCTS

- MD71EMC - Electromagnetic Compass System
- MD71TMC - Transmitting Magnetic Compass System
- MD97TMC - Transmitting Magnetic Compass System - Simplified
- MD203MFD - Multifunction Display for GNSS Compass

SPECIFICATIONS

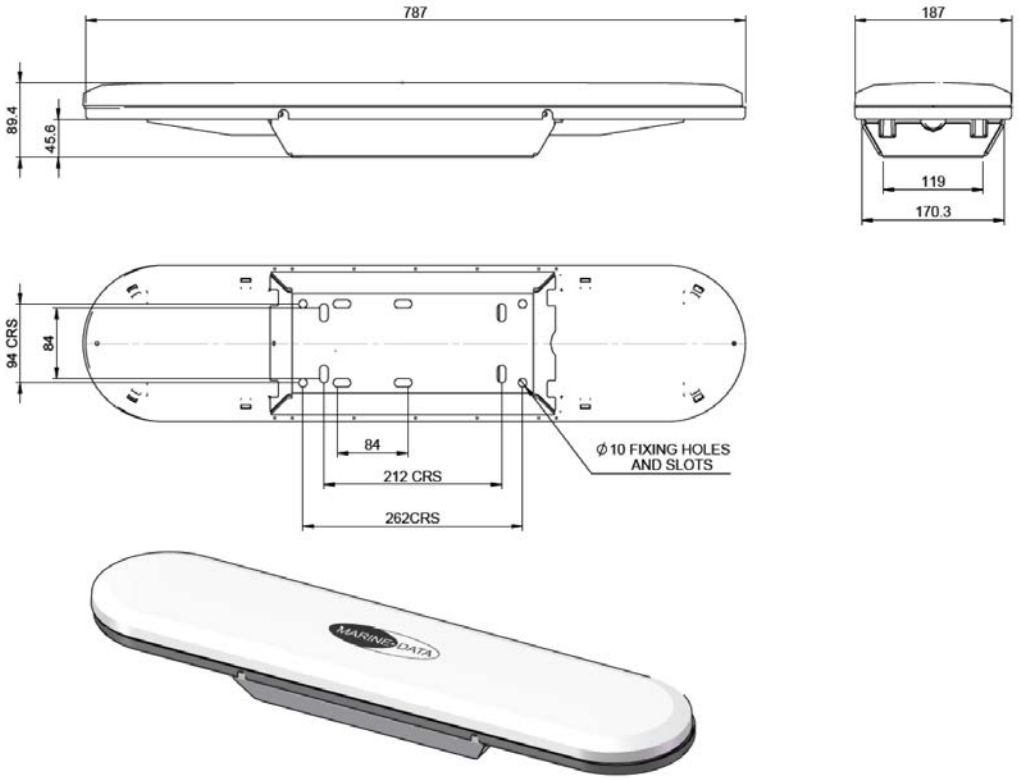
PHYSICAL	
Weight:	3 kg (excluding bracket)
Dimensions:	W 780mm; H 180mm; D 100mm;
Mounting:	Horizontal Surface
Connections:	1 RS-232, 1 RS-422, 1 Ethernet, 1 USB, 1 1PPS out
Construction:	Enclosure: Polyethylene Bracket: Anodised aluminium

ELECTRICAL	
Power Supply:	12 to 24 V DC
Data Inputs:	RTCM 104 v. 2.3
Data Sentences:	DTM, GBS, GGA, GLL, GFA, GNS, GSV, GSA, GST, HDT, RMC, ROT, THS, VBW, VLW, VTG, ZDA, ALF, ALR, ALC, ACK
Cable:	8 Pair, Shielded Twisted pair (Not Supplied)

APPROVALS	
Complies with:	IEC 60945/EN 60945
Type Approval:	Yes (MD203MFD is required)
Wheelmarked:	Yes (MD203MFD is required)

OPERATIONAL	
Heading acc., dynamic:	0.5º RMS
Heading resolution:	0.01º RMS
Rate of turn accuracy:	0.5º/s +5%
Position accuracy, DGNSS/SBAS:	1.2 m RMS
Velocity accuracy:	0.07 m/s 95 % CEP
Max turn rate:	80º/s

ENVIRONMENTAL	
IP rating:	IP66
Operating temp:	-25°C to +55°C
Operating Humidity:	100 % max.
Storage temp:	-30°C to +70°C
Storage Humidity:	100 % max.
Compass:	Safe Distance: 30 cm



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