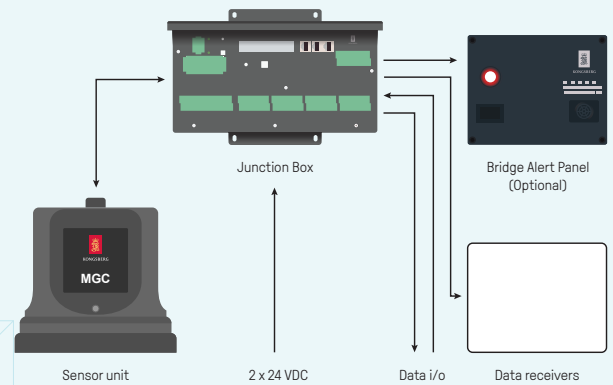


FEATURES

- 0.02° roll and pitch accuracy
- 0.1° heading accuracy GNSS aided
- No rotational or mechanical wear-out parts
- Outputs on RS-422 and Ethernet
- High output data rate (200 Hz).
- Small size, light weight and low power consumption
- IMO type approved
- Each MGC delivered with Calibration Certificate
- Selectable communication protocols in the configuration software



TECHNICAL SPECIFICATIONS

MGC R2 COMPASS

HEADING OUTPUT

Accuracy heading (speed aided)	0.15° RMS sec.lat
Accuracy heading (GNSS aided)	0.1° RMS sec.lat
Heading settling time to data available	<5 min from start-up
Heading settling time to full accuracy (typical)	17 min from start-up
Resolution	0.01°

ROLL AND PITCH OUTPUT

Output range	±90°
Resolution	0.001°
Angular rate noise	0.020°/s RMS
Accuracy	0.02° RMS

HEAVE OUTPUT

Output range	±50 m, adjustable
Periods (real-time)	0 to 25 s
Periods (delayed)	0 to 50 s
Heave accuracy (real-time)	5 cm or 5% whichever is highest
Heave accuracy (delayed)	2 cm or 2% whichever is highest

POSITION OUTPUT

Free inertial (GNSS aided)	5 nm/hr
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ELECTRICAL

Voltage input	24 V DC (nominal (18 to 32 V DC)
Power consumption	Max. 13 W (typical 11 W)
COM1 through COM8	Serial port, bidirectional RS-422/IEC 61162-1 and IEC 61162-2
Replica COM ports	8x3 (max. 24 ports) RS-422 output
Baud rate	Max. 115200 Baud
Ethernet	3x10/100 Mbps
Output data rate (max)	200 Hz
Timing accuracy	1 ms
Analog output	3 user configurable channels, +/-10 V
Relays	3, 60 Volt, 1 A solid state relays

INPUT FORMATS

NMEA sentences	GGA, GLL, VBW, VTG, ZDA
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OUTPUT FORMATS

NMEA sentences	GGA, GLL, VTG, HCR, HDT, ROT, THS
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OTHER DATA

MTBF (service history based)	100 000 h
MTBF (computed)	50 000 h

WEIGHTS AND DIMENSIONS

Sensor unit	188.9 x 189.5 x 189.5 mm, 8 kg
MGC junction box	67 x 308 x 155 mm, 1.5 kg
Repeater junction box	57.1 x 115 x 104 mm, 0.5 kg

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range

Sensor unit	-15 to +55°C
MGC junction box	-15 to +55°C
Repeater junction box	-15 to +55°C

Storage temperature range

Sensor unit	-25 to +70°C
MGC junction box	-25 to +70°C
Repeater junction box	-25 to +70°C

Enclosure protection

Sensor unit	IP66
Repeater junction box	IP54

Specifications subject to change without any further notice.

KONGSBERG MARITIME

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