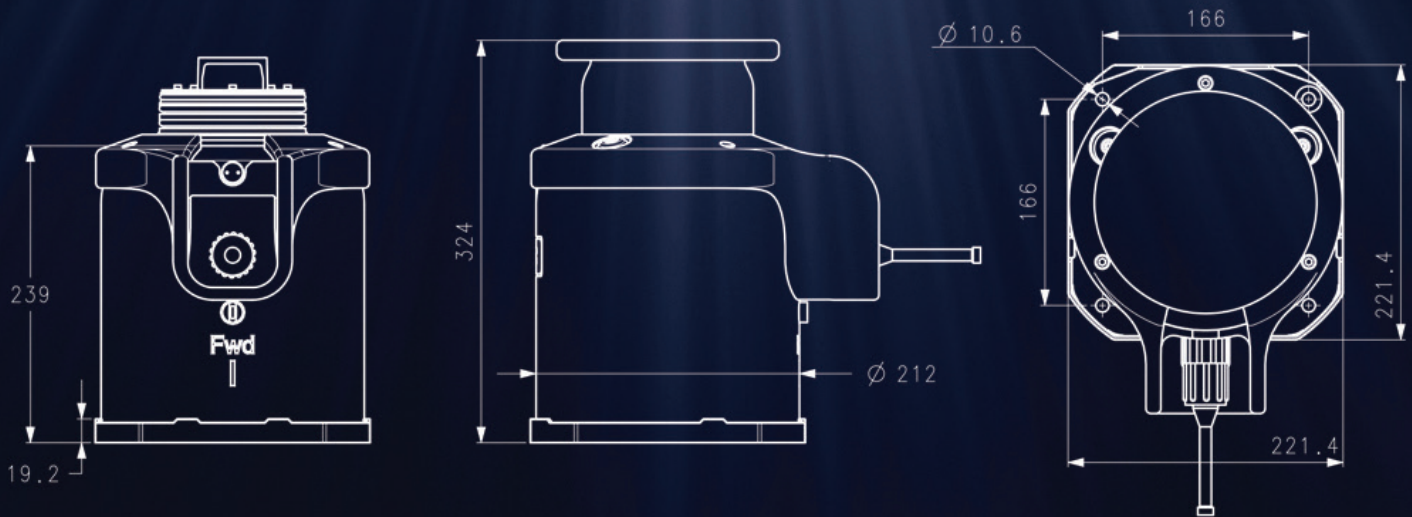




KONGSBERG

cNODE[®] GYRO ENDCAP MODULE



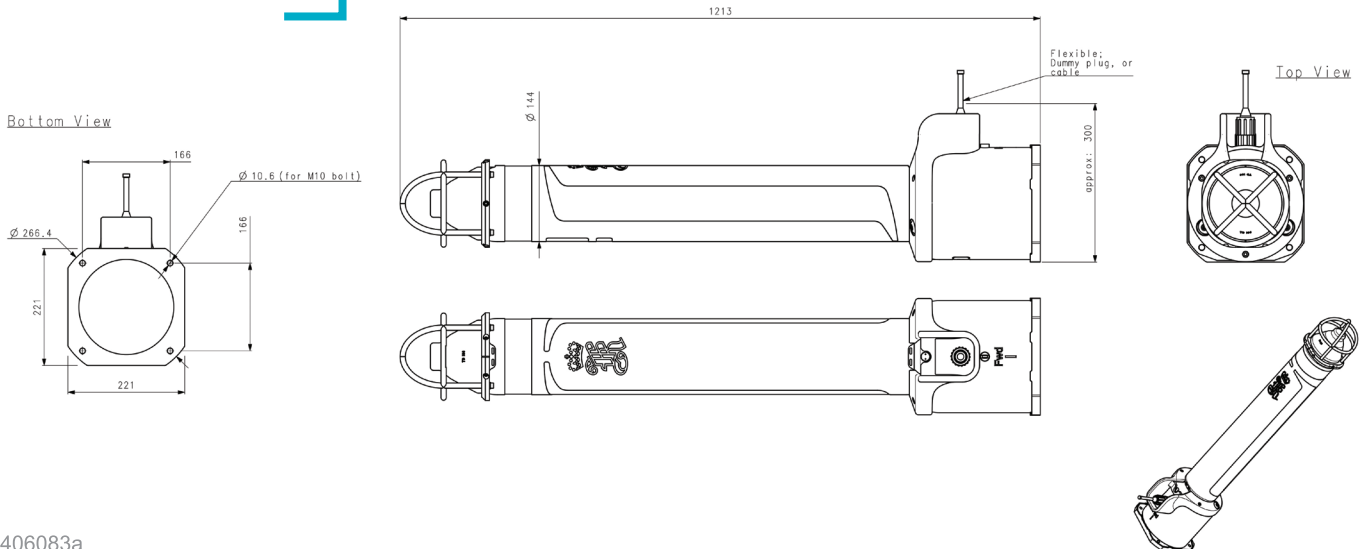
cNODE[®] GYRO ENDCAP MODULE

The cNODE[®] gyro endcap module is fitted with a Kongsberg MGC R3 gyro, which includes three ring laser gyros and three linear accelerometers, providing highly accurate attitude data. The gyro module has INS capabilities with embedded north seeking algorithms.

High accuracy attitude, heading, roll and pitch data is transmitted by the cNODE[®] transponder on the back of acoustic positioning pulses during installation of subsea structures. Acoustic communication with the cNODE[®] can be made through any permanent vessel fit, portable HiPAP[®] system or cPAP[®] ROV transceiver.

Designed to provide maximum utilization, the gyro module can be operated stand alone by fitting a blanking cap. This provides the flexibility to use the module on an ROV as a survey grade gyro, an IMU for HAIN Subsea, or as a vessel survey grade gyro.

cNODE[®] maxi outline drawings



FEATURES

- Kongsberg MGC R3 Gyro
- North seeking gyro algorithm
- Flat base with bolt holes for mounting
- Acoustic telemetry of attitude
- Attitude transmitted with SSBL and LBL position pulses
- Ethernet and RS232 data out
- Power internal battery or via external supply
- Storage card for data logging
- IMU for HAIN Subsea
- Can interface external sensor (RS-232)
- Can interface external ROV display and switch



TECHNICAL SPECIFICATION

WEIGHT AND DIMENSIONS

- cNODE® MAXI with gyro module**
- Overall Height: 1212 mm
 - Width: 212 mm
 - Weight in air: 45 kg
 - Weight in water: 22 kg
- Gyro Module with blanking cap**
- Overall Height: 324 mm
 - Width: 212 mm
 - Weight in air: 19.2kg
 - Weight in water: 8.5 kg

MAXIMUM OPERATING DEPTH

- 4000 m

POWER

- External Power: 9 – 36 V
- Power consumption: Max 20 W (typically 12 W)

SETTLING TIME

- Typically 17 minutes

cNODE® ENDURANCE WITH GYRO

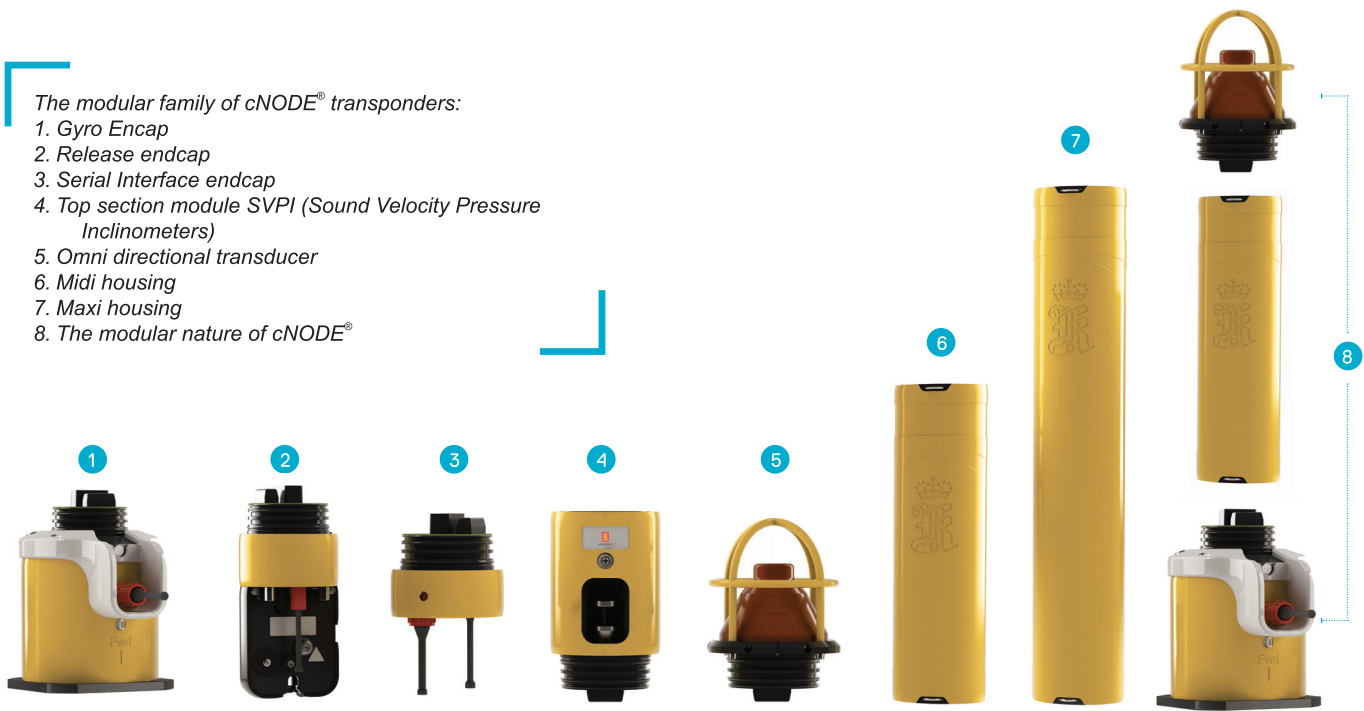
- Lithium Battery Maxi: 72 hours
- Lithium Battery Midi: 36 hours

AHRS ACCURACY

- Heading (GNSS aided): 0.08° sec. latitude
- Heading (subsea unaided): 0.15° sec. latitude
- Roll and Pitch: 0.01°

The modular family of cNODE® transponders:

1. Gyro Encap
2. Release endcap
3. Serial Interface endcap
4. Top section module SVPI (Sound Velocity Pressure Inclonometers)
5. Omni directional transducer
6. Midi housing
7. Maxi housing
8. The modular nature of cNODE®



Specifications subject to change without any further notice.

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