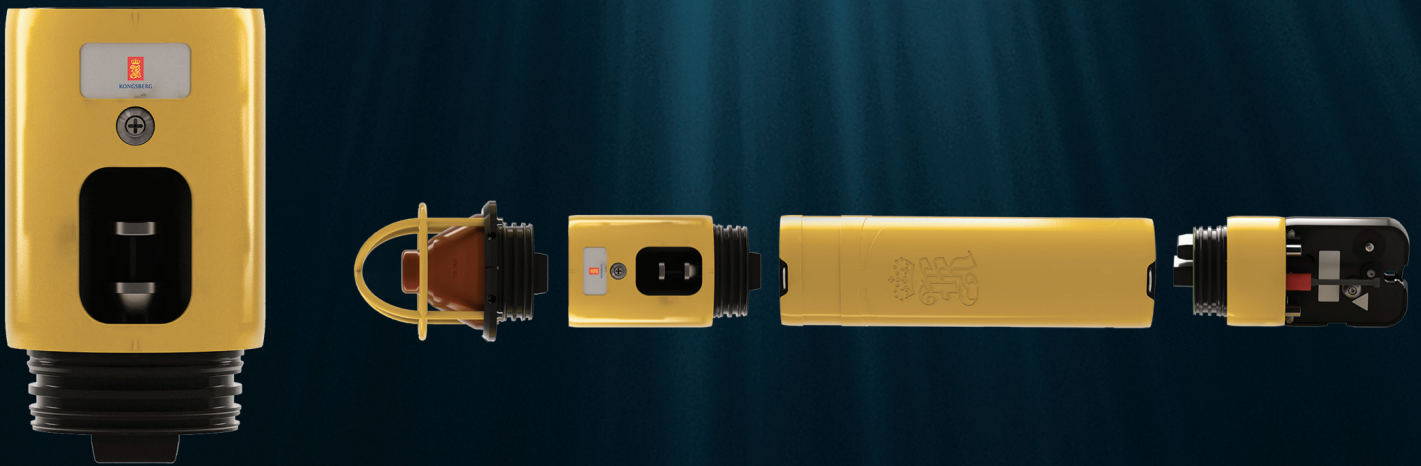




KONGSBERG

cNODE[®] SvPI MODULE



Sound Velocity, Pressure and Inclinator Sensor Module

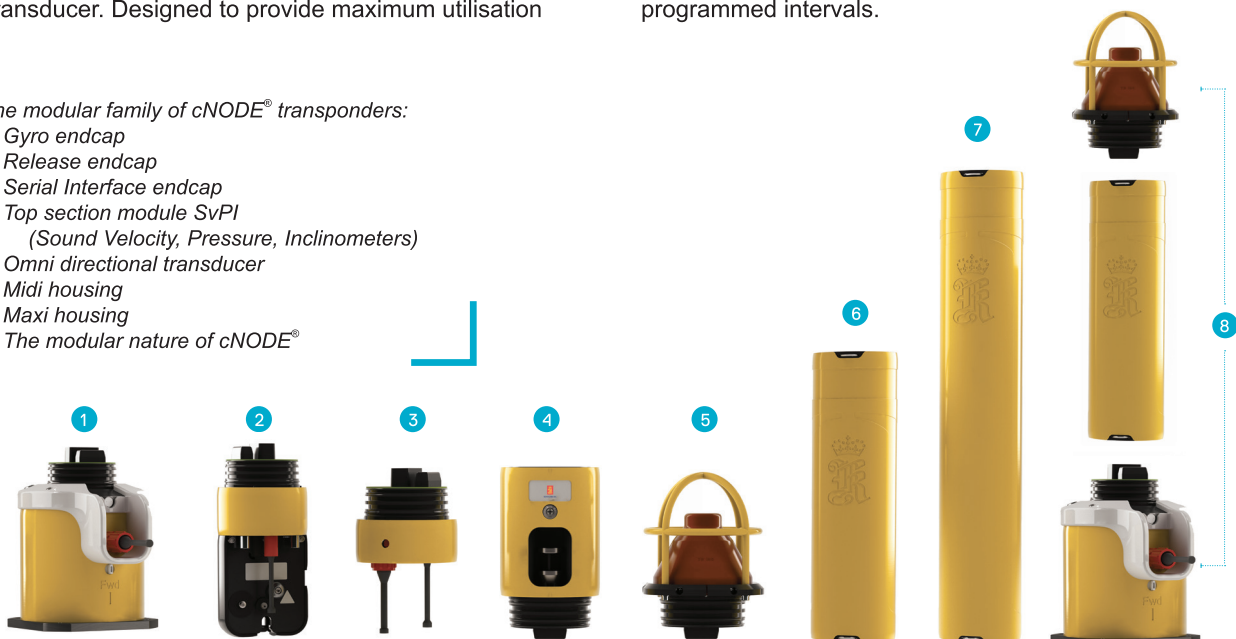
The SvPI module for cNODE[®] Maxi or Midi transponders provides a full suite of precision survey grade sensors for subsea positioning. These sensors are Digiquartz pressure, dual axis high accuracy inclinometers and sound velocity.

Pressure, inclination or sound velocity data may be transmitted by the cNODE transponder on the back of acoustic positioning pulses during installation of subsea structures. Acoustic communication with the cNODE is made from the vessel through any of the HiPAP family of transducers or cPAP LBL ROV transducer. Designed to provide maximum utilisation

of cNODE transponders, the SvPI module is fitted with internal logging capacity for autonomous monitoring. Seabed deformation and movement of flowlines or structures can be monitored over time by autonomous wake up and measurement of LBL baselines, sound velocity, pressure and inclination at programmed intervals.

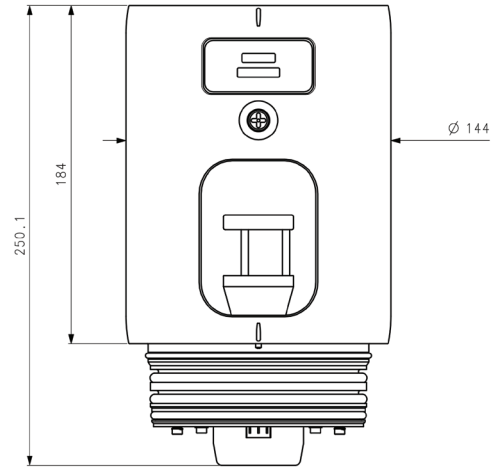
The modular family of cNODE[®] transponders:

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



FEATURES

- Paroscientific Digiquartz Pressure Sensor
- High Accuracy Dual Axis Inclinometers
- Acoustic telemetry of sound velocity, pressure and inclination
- Sensor data transmitted with SSBL and LBL position pulses
- Autonomous monitoring and data logging
- Valeport Sound Velocity Sensor (size: 25 mm)



TECHNICAL SPECIFICATION

WEIGHT AND DIMENSIONS

- cNODE MAXI with SvPI module and release
- Overall height: 1550 mm
 - Transducer endcap diameter: 184 mm
 - Housing diameter: 144 mm
 - Weight (in air): 34.6 kg
 - Weight (in water): 15 kg

- cNODE MIDI with SvPI module and release
- Overall height: 1240 mm
 - Transducer endcap diameter: 184 mm
 - Housing diameter: 144 mm
 - Weight (in air): 21 kg
 - Weight (in water): 10.5 kg

- Top Section SvPI module
- Overall height: 250 mm
 - Width: 144 mm
 - Weight (in air): 4.6 kg
 - Weight (in water): 2 kg

MAXIMUM OPERATING DEPTH

- 4000 m

INTERNAL LOGGING

- Storage: Standard 8 GB
- (Optional) Up to 64 GB

SENSORS

Digiquartz Pressure

- 700 m: +/- 0.01% (full scale)
- 1400 m: +/- 0.01% (full scale)
- 2000 m: +/- 0.01% (full scale)
- 4000 m: +/- 0.01% (full scale)

Dual Axis Inclinometers

- Accuracy: +/- 0.05°
- Range: +/- 90°

Sound Velocity

- Accuracy: +/- 0.02m/s

Specifications subject to change without any further notice.