

# cNODE® Transponders

## Maxi, Midi and Mini



cNODE® is a family of transponders for underwater acoustic positioning and data link. The transponders operate together with both HiPAP®, HPR and cPAP® transceivers. cNODE® utilises Cymbal® acoustic protocol and is compatible with the HiPAP®/HPR 400 channels and telemetry. cNODE® is designed to cover a large range of applications and this is made possible by the modular design and a variety of different transducers, internal and external sensors, housing materials and other add-on functions.

cNODE® is easy to set-up, operate and maintain. Both new configuration and software can be downloaded from TTC 30 without opening the transponders. The floating collar and release design make the launch recovery operation safe and easy. Spare parts for cNODE® are based on the main modules.

The cNODE® transponder family consists of the models Maxi, Midi and Mini.

### Specifications

<b>Product</b>	cNODE® Transponders Maxi, Midi and Mini
<b>Country of origin</b>	Norge
<b>Manufacturer</b>	Kongsberg Discovery

## Featuring

- Cymbal channels (500+)
- Acoustic telemetry for battery status and tilt sensor
- Responder and transponder functionalities
- SSBL and LBL positioning
- Range measurements between transponders
- 600 metre depth rated
- 180° omnidirectional beam
- Internal tilt sensor  $\pm 90^\circ$
- Coated Anodised aluminium housing
- Internal rechargeable Li-Ion battery
- External on/off function
- Pressure relief valve (safety device)
- Frequency band 21-31 kHz
- Operating temperature -5 °C to +55 °C
- External connector for configuration, software update and charging

## Technical specifications

<b>Km item number</b>	424770
<b>Dimensions (length x diameter)</b>	245 x 55 mm
<b>Weight in air/water</b>	1 kg / 0.4 kg
<b>Depth range</b>	600 m
<b>Beam width</b>	180°
<b>Source level - max</b>	170 dB
<b>Trigger level</b>	< 85 dB

## Operating battery lifetime

<b>QUIESCENT BATTERY LIFETIME</b>	< 10 days
<b>CYMBAL® (Low power, 1 sec update rate)</b>	< 48 hours

## Other specifications

<b>Responder trigger signal</b>	5V to 25V positive logic pulse (2ms - 6ms)
<b>External connector</b>	Seacon MC-IL-8-F (cNODE MiniS compatible)
<b>Battery charger input voltage</b>	110/230 VAC