

# cNODE® MiniS



KONGSBERG



## cNODE® MiniS 34-180 and cNODE® MiniS 34-40V

The cNODE® MiniS transponders are the smallest members of the cNODE® family. These are used with HiPAP®, cPAP® and  $\mu$ PAP® systems in underwater positioning and are ideal for positioning of ROVs. The MiniS also operate with data telemetry.

Some common features of the cNODE® MiniS family include:

- Cymbal channels (500+)
- HiPAP/HPR 400 channels
- Responder and transponder functionalities
- Telemetry capabilities
- SSBL positioning
- LBL positioning
- Range measurements between transponders
- 4000 metre depth rated
- 34-180 has 180° omnidirectional beam
- 34-40V has 40° degree cone beam
- Coated Anodised aluminium housing
- Internal rechargeable Li-Ion battery
- Battery charger: 0-100 % in one hour
- Takes charge from ROVs 24V
- External Power; 24VDC (18 - 36V), 1A
- External connector for configuration and software update
- Transmitting power; Max, High, Low, Min (6 dB steps)
- External on/off function
- Internal tilt sensor  $\pm 90^\circ$
- Pressure relief valve (safety device)
- Frequency band 21-31kHz
- Operating temperature  $-5^\circ\text{C}$  to  $+55^\circ\text{C}$ .

## TECHNICAL SPECIFICATION

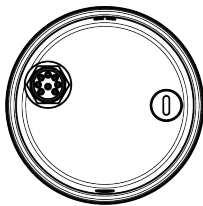
MODEL	cNODE MiniS 34-180	cNODE MiniS 34-40V
KM ITEM NUMBER	396588	396590
DIMENSIONS (Length X Diameter)	306 x 105mm	321 x 105mm
WEIGHT IN AIR / WATER	4kg / 2.1kg	4.6kg / 2.1kg
DEPTH RATING	4000m	4000m
RANGE CAPABILITY	1000m	4000m
BEAM WIDTH	180°	40° vertical
SOURCE LEVEL - MAX	188 dB	203 dB
TRIGGER LEVEL	< 85 dB	< 80 dB

### OPERATING BATTERY LIFETIME

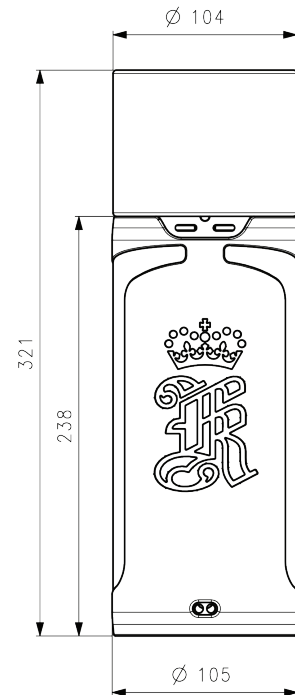
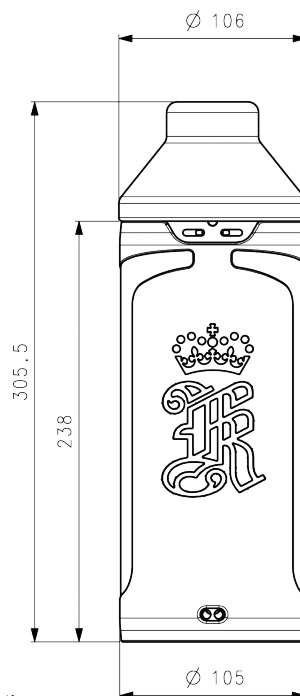
QUIESCENT BATTERY LIFETIME	30 days
CYMBAL® (Low power, 1 sec update rate)	> 2.5 days
CYMBAL® (Low power, 3 sec update rate - power save mode)	> 7 days
FSK (High power, 3 sec update rate)	> 4.5 days

### OTHER SPECIFICATIONS

RESPONDER TRIGGER SIGNAL	5V to 25V positive logic pulse (2ms - 6ms)
EXTERNAL CONNECTOR	Seacon MCBH8MDO
PIGTAIL CABLE	Seacon MC-IL-8-F (length 60cm)
BATTERY CHARGER KM ITEM NUMBER	404199
BATTERY CHARGER INPUT VOLTAGE	110/230 VAC



Outline drawings for the  
cNODE MiniS transponders



Specifications subject to change without any further notice.

407452a

KONGSBERG MARITIME

Sales: +47 33 03 41 00

Customer support: +47 33 03 24 07

E-mail sales: subsea@kongsberg.com

[www.km.kongsberg.com](http://www.km.kongsberg.com)



KONGSBERG