



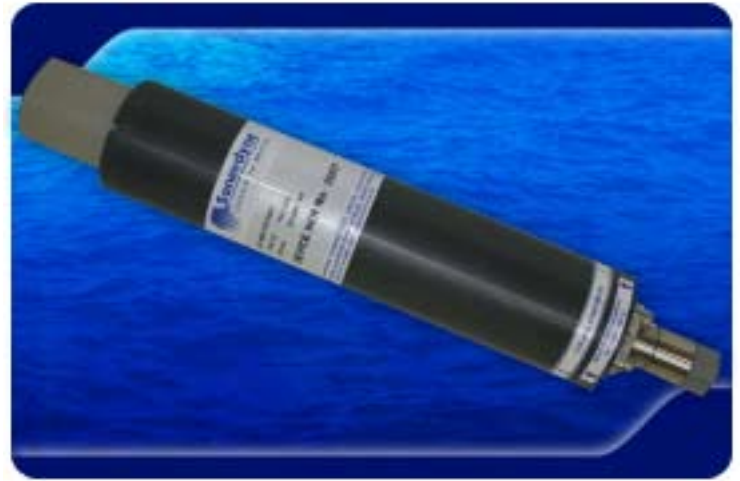
Mini ROVNav LBL Transceiver Types 7842/7860

Mini ROVNav is a remote acoustic transceiver designed to accurately position deepwater, mobile targets, such as ROVs and geophysical towfish.

The Type 7842 is a Medium Frequency (18-36 kHz) version which gives ranges up to 3km (subject to local noise) and a relative positioning of $\pm 0.15\text{m}$.

The Type 7806 Extra High Frequency (50-110 kHz) Mini ROVNav enables relative positioning accuracies of $\pm 0.05\text{m}$ to be achieved with ranges of up to 1km (subject to local noise).

Working within a Long BaseLine (LBL) array, Mini ROVNav measures ranges to seabed transponders.



FEATURES AND BENEFITS

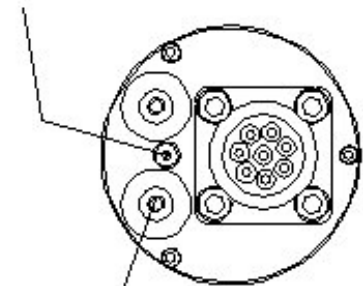
Type 7842 MF Mini ROVNav

- Depth rated to 4,000m
- MF frequency providing ranges up to 3km and positioning accuracy of $\pm 0.15\text{m}$
- Compatible with Sonardyne LBL and LUSBL
- RS232/RS485 full or half duplex interface through umbilical for fast position updates
- Compact and rugged design

Type 7842 MF Mini ROVNav

- Depth rated to 2,000m
- EHF frequency providing ranges up to 3km and positioning accuracy of $\pm 0.05\text{m}$
- Enables high accuracy LBL equipment to be used in deep water
- Integral depth and temperature sensors
- Powered from ROV's umbilical

Pressure transducer port



Sacrificial anodes

TECHNICAL SPECIFICATION

Mini ROVNav Type	Type 7842	Type 7860
Depth Rating	4,000 m	2,000m
Frequency Range	MF (18 - 36 kHz)	EHF (50-110kHz)
Transducer Beamshape	Omni-directional	Omni-directional
Acoustic Output	190 \pm 4dB	190 \pm 4dB
dB re 1 μPa @ 1m	(High Power Mode)	(High Power Mode)
Receive Sensitivity	< 96 dB	<100 dB
dB re 1 μPa		
Remote Transducer	Optional	Optional
Pulse Length	4 ms	1ms
Range Resolution	1.0 ms	0.01 ms
Depth Sensor Options	500m, 2000m, 4000m	500m, 2000m
Depth Measurement Resolution	0.2% Full Range Output	0.2% Full Range Output
Accuracy @ 4 °C	$\pm 8\text{m}$ @ 4,000m	$\pm 8\text{m}$ @ 2,000m
Temp Measurement		
Resolution	0.01 °C	0.01 °C
Accuracy	0.1 °C	0.1 °C
Power Supply	2W between 18 -72 V	2W between 18 -72 V
Mechanical Construction	Aluminium Alloy Hard Anodised	Aluminium Alloy Hard Anodised
Connections	8-pin AGP Plug Type AGP-2608-F	8-pin AGP Plug Type AGP-2608-F
Weight in Air	5.5 kg	6.0 kg
Options	Acoustic noise shield with remote transducer	

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.