Super SeaKing Profiler

Dual Frequency Profiling Sonar

Composite transducer technology for increased range and image resolution

The Super SeaKing dual frequency profiler uses the latest technological advances available in transducer design. A composite transducer technology has been used to ensure that this sonar offers substantially increased range and image resolution.

Using side lobe suppression techniques, improved signal to noise reduction and a reduced beamwidth the Super SeaKing dual frequency profiler provides high quality profiling in a compact mechanical scanning sonar.

The Super SeaKing profiler uses a 1.1MHz operating mode for high accuracy work at short ranges or in clear water.

Additionally the Super SeaKing profiler is a dual frequency device, and when required a 0.6MHz operating mode can be used in water containing suspended particles. The lower frequency can also be used if longer ranges are required.

As part of the SeaKing suite of survey sensors the Super SeaKing dual frequency profiler can run simultaneously with a number of SeaKing sensors on one network.

Benefits

- Simultaneous use with SeaKing sensors
- Robust, reliable, proven design
- High quality profile data
- Easy system integration

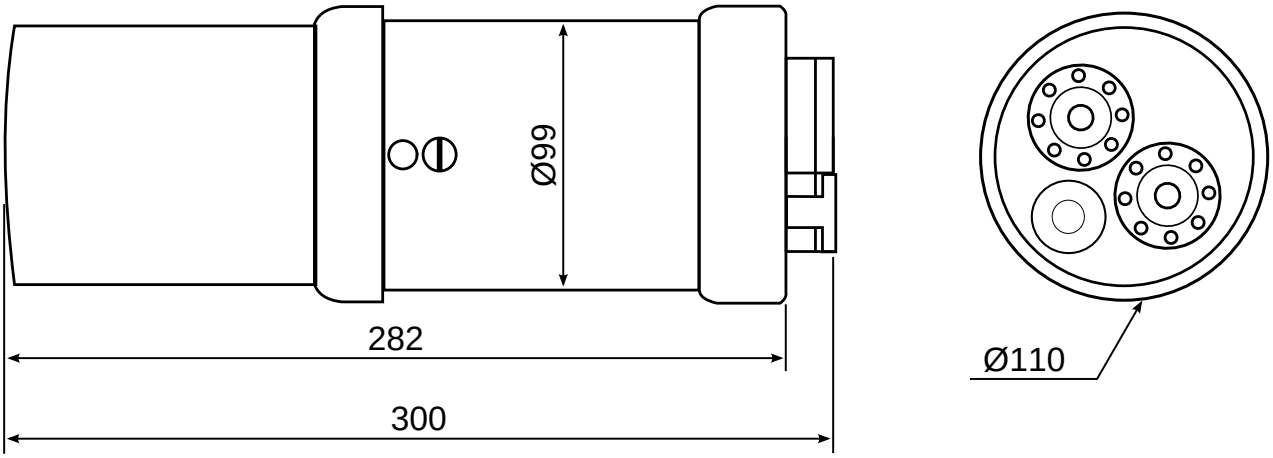
Features

- Dual frequency transducer
- Hard boot for protection
- Connector options available
- 4000m depth rating
- Fast scan rates
- ARCNET, RS485 or RS232

Applications

- Pipeline and trench profiling
- Precision positioning of mattresses
- Storage tank survey
- Underwater surveying of bridge supports

Specification



Not to scale, dimensions in mm.

Acoustic	High frequency	Low frequency
Operating frequency	1.1MHz	600kHz
Beamwidth	1° conical	2° conical
Maximum range	40m	80m
Pulse length	20 - 200µs	
Minimum range	0.3m	
Scan resolutions	0.45°, 0.9°, 1.35° 1.8°	
Source level	210dB re 1µPa at 1m	
Scanned sector	Up to 360°	
Continuous 360° scan?	Yes	
Sector offset mode?	Yes	
Timing resolution	1mm	

Physical	
Weight in air	3.5kg (aluminium)
Weight in water	1.7kg (aluminium)
Materials	Boot: Acetal copolymer Body tube: Anodised aluminium alloy (6Al4V Titanium optional)
Depth rating	4000m
Temperatures	Operating: -10 to 35°C Storage: -20 to 50°C

Electrical and Communications	
Power requirement	20 to 72V DC at 8W AUX port voltage equal to Main port supply
Communication protocols	ARCNET, RS485, RS232 (single head only)
Communication rate	ARCNET: 156kbit·s^{-1}, 78kbit·s^{-1} RS232 & RS485 : 115.2kBd
ARCNET line driver	1500m at 156kbit·s^{-1} 2500m at 78kbit·s^{-1}
Connector options	Tritech 6-pin (standard) Others available on request

Specifications subject to change according to a policy of continual development.

Document: 0374-SOM-00007, Issue: 03

Marketed by:

Tritech International Ltd
Peregrine Road, Westhill Business Park
Westhill, Aberdeenshire, AB32 6JL
United Kingdom
sales@tritech.co.uk
+44(0)1224 744 111