# **Super SeaKing Profiler**

Dual Frequency Profiling Sonar



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.

## 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.

#### **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 or RS232

### **Applications**

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



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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		Electrical and Communication	
Weight in air	3.5kg (aluminium)	Power requirement	20 to 36V DC at 1A
Weight in water	1.7kg (aluminium)	Protocols	ARCNET, RS232
Materials	Boot: Acetal copolymer Body tube: Anodised aluminium	Rate	ARCNET: 156kbit·s <sup>-1</sup> (maximum) RS232: 115.2kBd (maximum)
	(6AI4V titanium alloy optional)	ARCNET line driver	1500m at 156kbit·s <sup>-1</sup> 2500m at 78kbit·s <sup>-1</sup>
Depth rating	4000m		
Temperatures	Operating: -10 to 35°C Storage: -20 to 50°C	Connector options	Tritech 6-pin (standard) Others available on request

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

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

