



SuperSeaKing DST

Sonar numérique - système CHIRP

Le **Super SeaKing DST bi-fréquences** est un des derniers nés des sonars à balayage. Utilisant les dernières techniques de transducteurs composites il permet de faire un bon en avant en termes de qualité d'image et d'augmentation de portée. Un nouveau design de transducteur modulaire et une grande bague d'assemblage permettent un entretien facile et améliorent grandement la fiabilité des sonars de la famille SeaKing.

The Super SeaKing DFS shares many of the features of the SeaKing DFS, which has been chosen as the standard obstacle avoidance sonar in many of the major ROV fleets around the world.

The Super SeaKing DFS is not one but **two** mechanically scanned imaging sonars in a single subsea pressure housing : a **325 kHz** sonar with a true operational range of up to 300 metres for long range target acquisition, and a **675 kHz** sonar for ultra-high definition images. Other frequency options are available upon request.

All products in the SeaKing family can be run simultaneously on a single **ArcNet communications link**, using the same processor and display.



Caractéristiques

- Matériau composite pour un nouveau design du transducteur:
 - Amélioration de la portée
 - Amélioration de la résolution et suppression des lobes secondaires
 - Interface directe et compatible avec les transducteurs existants– mis à jour possible
- Construction modulaire du transducteur – remplacement par élément.
- Nouvelle bague d'assemblage plus longue
- Option de communication RS232 pour l'application avec une seule tête sonar.

Applications

- ROV : détection d'obstacles
- AUV : détection d'obstacles et reconnaissance de cibles
- Surveillance des ports.

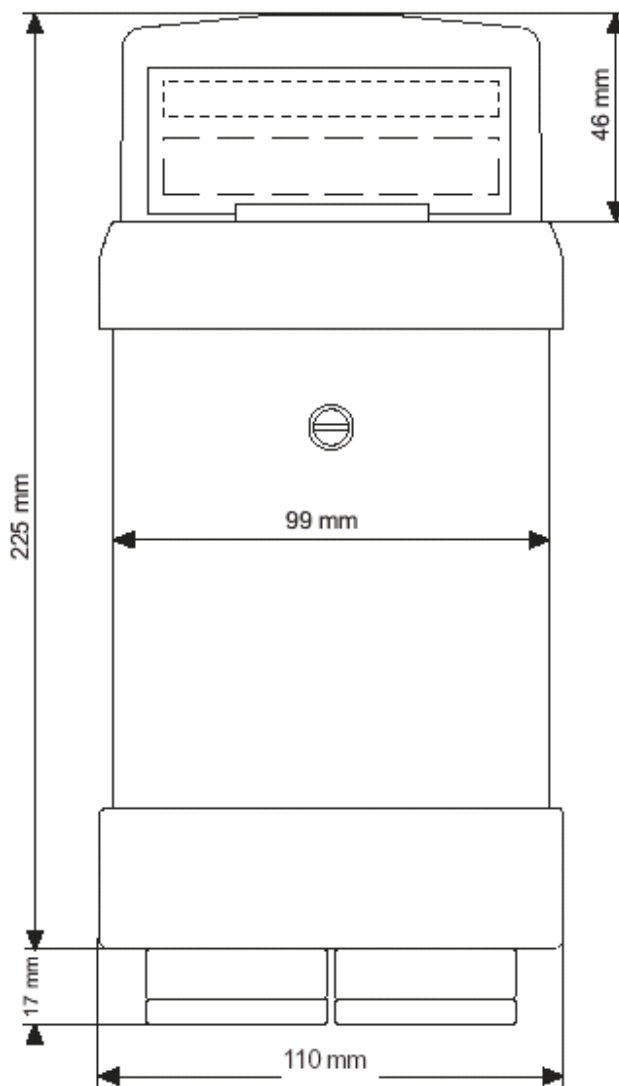
Specification Super SeaKing DFS Sonar Head

Operating frequency	325 and 675 kHz
Optional high frequency	1 MHz
Beamwidth,	vertical 20°[325]
Beamwidth,	vertical 40°[675]
Beamwidth,	horizontal 3.0°[325]
Beamwidth,	horizontal 1.5°[675]
Maximum range	300 m [325]
Maximum range	100 m [675]
Minimum range	0.4 m
Range resolution	5 - 400 mm depending on range
Source level	210 dB re 1uPA @ 1 m
Pulse length	20 - 300 microsec
Scan modes	Various combinations of resolution & speed
Mechanical step sizes	0.225°, 0.45°, 0.9°, 1.8°
Mechanical resolution	0.225°
Scanned sector	Variable to 360°
Continuous 360° mode available	Yes
Sector offset mode available	Yes
Overall maximum diameter	110 mm
Maximum length	242 mm
Weight in air	3.0 kg
Weight in water	1.4 kg
Standard maximum operational depth	4,000 m
Optional maximum operational depth	6,800 m
Standard materials	Aluminium alloy-HE30, RPU
Optional materials	Stainless steel
Finish	Hard anodised black
Standard connector	Tritech 6 pin with water-block
Connector options	Various upon request
Operating temperature	-10°C to +35°C
Storage temperature	-20°C to +50°C
Power requirements	18 to 36 VDC @ 10VA
Communication protocols	Arcnet, RS232
Data communication rate	Arcnet 156 kBits/sec 78 kBits/sec RS232 115.2 kbaud
Communication requirements	Twisted pair, modem or coax

Surface Controls and Display

Software Features

Range selection	1 to 300m
Gain and contrast	Rotatory controls
Scanned sector	Fully variable in direction and width to 360°
Quick select origin shift	Centre, forward, reverse, left and right
Resolution selection	0.225° to 1.8°
Cursor measurements	Origin to target and Target to target



Key features include :

- Real-time true acoustic zoom
- Full screen true acoustic zoom with second 360° PPI display window
- Real-time switching between 325 kHz and 675 kHz
- Built-in 100 kHz to 2 MHz spectrum analyser mode
- Runs on industry standard SeaNet SCU or on user-supplied PC
- Integrates with all other Tritech SeaKing sensors
- Time stamped data logging and replay to hard disk
- Control and cursor reporting via SK-V4 protocol available
- Instantaneous scan reversal

Pour plus d'informations, n'hésitez pas à nous contacter.
MARITECH sarl, Chemin Saint Joseph, 83310 GRIMAUD (France)
 Tél. : 04 94 43 31 61 Fax : 04 94 43 31 36 Email : Maritech@free.fr