

SeapiX-FLS Series

Forward Looking Sonar
ensuring safe navigation

The SeapiX-FLS Series is a 3D multi-beam Forward Looking Sonar designed for obstacle avoidance from the surface to the seabed. Thanks to its unique three-dimensional coverage, it provides a clear and precisely geo-referenced picture of the surrounding environment.



SeapiX-FLS 5



SeapiX-FLS 7

Bottom, water-column and surface object detection

- Vertical and horizontal swath coverage
- Real-time detection performance evaluation chart
- Forward looking bathymetry

Fully autonomous

- Automatic settings optimizing processes from detection to classification
- Compact and all-in-one integration
- State-of-the-art cyber-secured sonar

Applications



Intruder detection



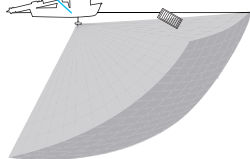
Obstacle Avoidance



Navigation

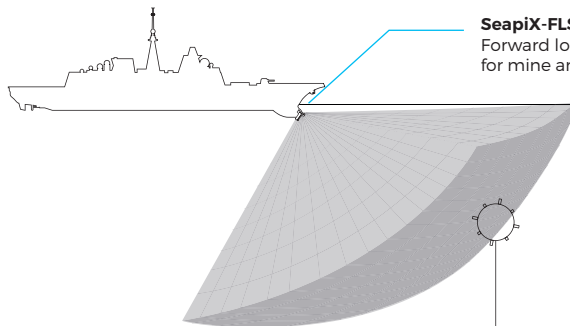
SeapiX-FLS 5

Forward Looking Sonar for obstacle avoidance, water column and seabed awareness



SeapiX-FLS 7

Forward looking sonar designed for mine and obstacle avoidance



TECHNICAL SPECIFICATIONS

	SeapiX-FLS 5	SeapiX-FLS 7
DESCRIPTION	FORWARD LOOKING SONAR FOR OBSTACLE AVOIDANCE, WATER COLUMN AND BATHYMETRY MAPPING	FORWARD-LOOKING SONAR DESIGNED FOR MINE AND OBSTACLE AVOIDANCE
PLATFORMS	OPVS AND UNMANNED SYSTEMS	SURFACE SHIPS AND SUBMARINES
MAIN DETECTION PERFORMANCE⁽¹⁾		
MID-WATER TARGETS (-15 DB)	> 330 m	> 650 m
SURFACE TARGETS (-15 DB)	> 300 m	> 350 m
BOTTOM TARGETS (-15 DB)	> 200 m	> 350 m
LOW TS TARGETS (-25 DB)	> 250 m	> 520 m
SPECIFICATIONS		
FREQUENCY	150 kHz	60 kHz
MODULATION	CW and CHIRP	
VERTICAL TRACK MULTIBEAM SWATH	256 channels, stabilized	
HORIZONTAL TRACK MULTIBEAM SWATH	256 channels, stabilized	
BEAM STABILIZATION	Electronically steerable TX + RX, built-in IMU	
BEAM RESOLUTION	1.6° angular / 2.5 cm radial ⁽²⁾	1.6° angular / 7.5 cm radial ⁽²⁾
VOLUME RESOLUTION	0.2m ³ @100m	0.6m ³ @100m
VOLUME COVERAGE	120° X 120°	90° X 90°
POWER CONSUMPTION	300 W	1 KW
SONAR ANTENA UNIT (SAU) CABLE	20 m with wet mateable connector	10 m with wet mateable connector
SAU WEIGHT (AIR/WATER)	58 kg (in air) / 31.7 kg (in water)	43 kg (in air) / 29 Kg (in water)
SAU DIMENSION	250 x 430 (diam) mm	140 x 845 x 160 mm
MOUNTING	Pole or Hull mounted	Pole, Hull or Bulb mounted

(1) Mode CW 1ms. Detection threshold 13dB. Environment dependent (SS3)

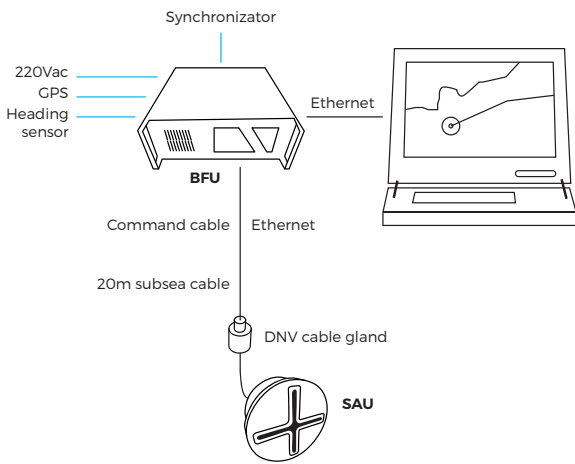
(2) in line, up to 3.2° @ +/- 60° tilt | Specifications subject to change without notice

SOFTWARE

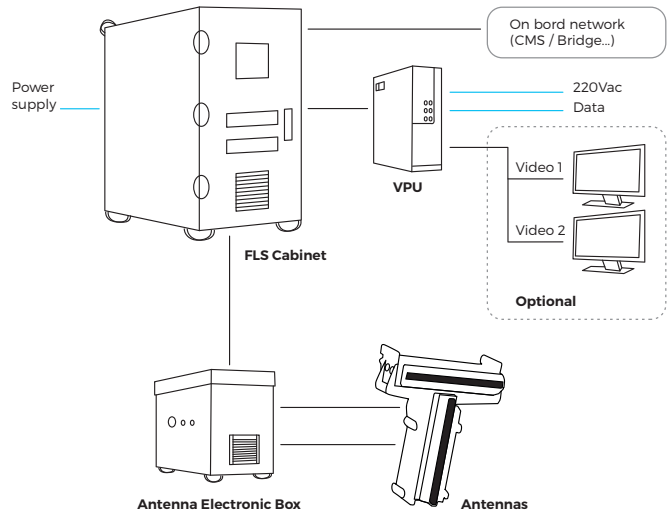
Single operator oriented MMI



Multi-configuration available on board



SeapiX-FLS 5 integration



SeapiX-FLS 7 integration