

# HydroScan 1400/4900/900P

## Side Scan Sonar System

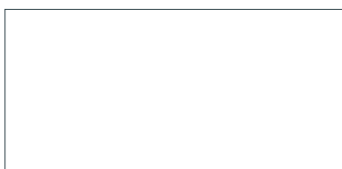
### Data Specifications

Model	HydroScan 1400	HydroScan 4900	iSide 900U
Picture			
Frequency	100kHz & 400kHz	400kHz & 900kHz	400kHz
Pulse width	20~1000µs (CW), 1ms~4ms (LFM)	20~1000µs (CW), 1ms~4ms (LFM)	20~500µs(CW) 0.5ms~2Mms(LFM)
signal types	CW/LFM	CW/LFM	CW/LFM
Horizontal beam angle	0.6°@100kHz, 0.2°@400kHz	0.2°@400kHz, 0.2°@900kHz	0.3°
Vertical beam angle	45°	45°	45°
Depression angle	10°, 15°, 20° optional	10°, 15°, 20° optional	15°
Along track resolution	0.01h@100kHz 0.003h@400kHz	0.003h@400kHz 0.003h@900kHz	0.005h@400kHz
Across track resolution	1.25cm	1.25cm	1.25cm
Maximum range	450m@100kHz, 150m@400kHz	150m@400kHz, 75m@900kHz	150m
Work speed	2-6kn	2-6kn	2-6kn
Depth rating	1000m	1000m	300m
Demension	105mm*1300mm	105mm*1170mm	637mm*105mm
Weight	30kg (316#Stainless steel)	26kg (316#Stainless steel)	6kg(Aluminum)
Power	MAX 40W	MAX 30W	24V DC, 15W
Inner Sensor	Attitude, heading, presure, depth sensor	Attitude, heading, presure, depth sensor	/
Cable	Kevlar cable, standard 50m (250m optional)	Kevlar cable, standard 50m (250m optional)	Kevlar cable, standard 2m(Optional)
Hi-Max SSS	NMEW 0183 input; OTSS, XTF, output; windows		

\* h means operating range

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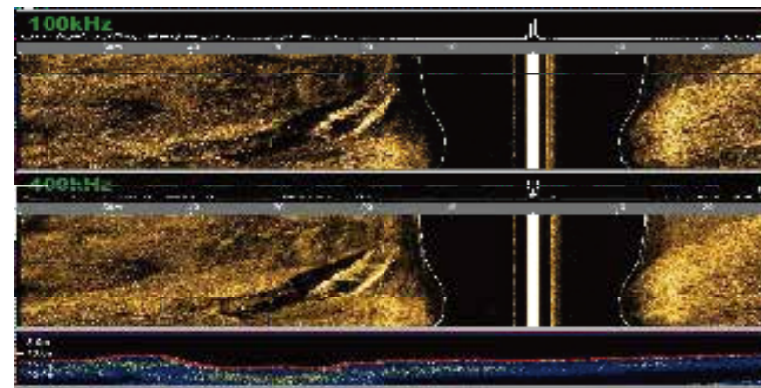
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## The Multiple frequencies Side Scan Sonar Systems

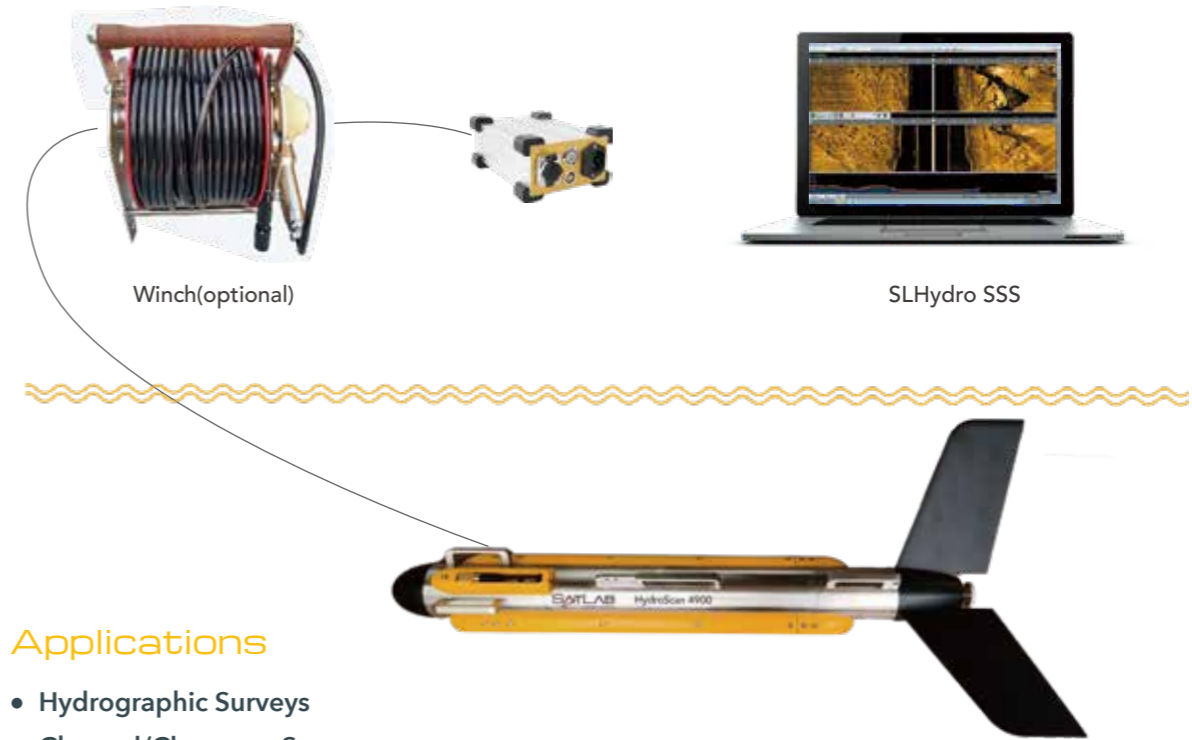
With the possibility to switch freely between CW and CHIRP on multiple frequencies, at 100kHz, 400kHz or 900kHz, the side scan sonar system provides a clearer view of the water bottom on dual simultaneous frequency, for object searching, dredging, and other industry applications.

The 1400 series is a versatile high-resolution side scan sonar system which can emit CW&CHIRP pulses of 100KHZ & 400KHZ simultaneously. Joint with SatLab patented algorithm, the advanced digital circuit processing technology provides users with remarkable high resolution or large range underwater imagery widely applied in cable&pipeline surveys, geological&geophysical surveys, mine countermeasures, channel clearance, search and recovery, archaeological surveys.

All HydroScan systems are comprised of a sturdy stainless steel towfish, waterproof topside processor and SLHydro SSS software. Multiple sensors are internal in towfish with data real-time displayed in SLHydro SSS. Integrated with low power consumption design, the power supply can be either AC or battery. With the portable and compact structure, towfish can be easily operated by single operator.



## Composition of side scan sonar system



## Applications

- Hydrographic Surveys
- Channel/Clearance Surveys
- Search&Rescue&Found
- Water Construction Inspections
- Geological Surveying and Mapping
- Environmental Habitat Surveys
- Cable Route& Pipeline Surveys



### Multiple Frequency Available

There are multiple frequencies available to use according to required applications. 100/900kHz, 400/900kHz and 400kHz, users can always find a suitable mode.



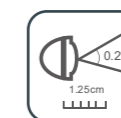
### Real-time CW & CHIRP

Real-time switching provides an adaptive solution for users, while the anti-noise performance is improved, the resolution higher and the range longer.



### Multiple Internal Sensors

By integrating the sensor for heading, pitch, roll, depth and pressure, images are corrected in real time and related reference information can be acquired to ensure operational safety.



### Ultra Small Beam Angle

Beam angle can be up to 0.2°, providing resolution up to 1.25cm, so it is easy to recognize smaller objects.



### Strong and Robust Towfish

Adopting a fluid mechanics design, the 316 stainless steel housing can help the tow fish endure even 1000m depths.



### Meets IHO & NOAA Survey Standard



TECHNICAL SUPPORT  
Satlab offers online resources and a professional support network available worldwide.