



#### **Embedded platform**

ES series of side scan sonar has the features of small size, light weight, low power consumption. Its structure is simple, operation is easy, which is suitable for integration application. With different frequency, diversified shape and connector, ES series can meet the requirements of various small USV, ROV and AUV to do second development.



### Compatibility

ES Series is compatible with various devices via Ethernet cable & RS232 Com port. Realize multi-module combintion and collect all types of data of different sensors. It provides 8 output of sync signal by programmable TTL, which efficiently resolve complex sound interfering and synchronization control problem.



### **High Resolution Image**

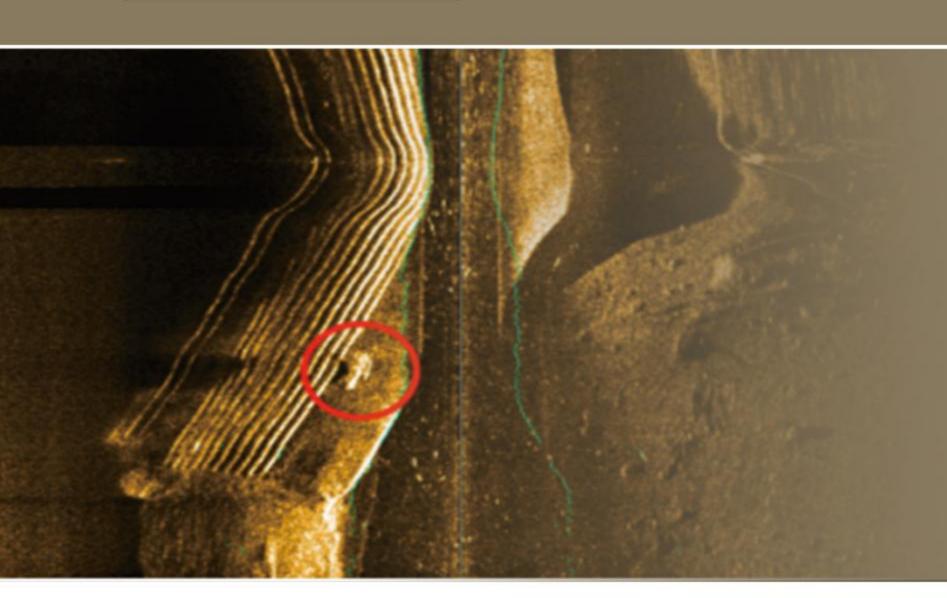
Innovative transducer design and advanced self-adaptive waveform adjustment technology combining broadband signal processing & image equalization technology, ES series side scan sonar can provide a larger scanning range and high-definition results.





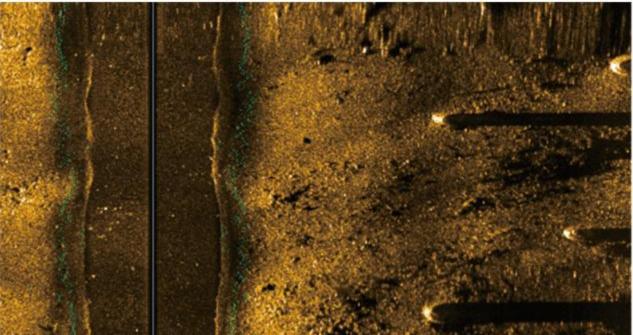


# ES Series Embedded Side Scan Sonar



ES Series embedded side scan sonar is multi-frequency optional specially designed for AUV, USV, ROV and other unmanned platforms. The selectable working frequency range is from 450 to 900kHz. It is available for standard version and customized product, from single-frequency to dual-frequency, different size and shape. ES series side scan sonar adopts self-adaptive wave adjustment technology combining broadband signal processing and image equalization technology. They can clearly scan the image of small objects and complex underwater infrastructure. This is very helpful for underwater safety and small target detection applications.









## Application



Emergency Rescue



Structure Inspection



USV application



Environmental Investigation

### **Technical Specification**

Signal Form:		CW/Chirp(Optional)		
Working Depth:		100m ~ 1000m (Optional)		
Electronic system	size:	12.7cmx58cmx2.7cm(LxWxH)		
Electronic system	weight:	220/750g		
Power Supply:		DC 10-30V		
Power Consumpt	ion :	10W-15W		
Data Interface:	1 100M E	thernet control and data interface		
		1 RS232 data interface		
		1 TTL sync input interface		
		8 TTL sync output interface		
Software:	HydroSonar and SDK development kit			
Optional:	Micro data log	licro data logger, high-power storage capacitor		

## Specifications

	ES900M	ES900	ES4590
Working Frequency	900kHz	900kHz	450/900kHz
Parallel Beam Width	0.4°	0.2°	0.2°
Vertical Beam Width	40°	50°	50°
Max Slope Range	75m	75m	150m@450kHz 75m@900kHz
			450kHz
	0.14m@20m	0.07m@20m	0.17m@50m
			0.34m@100m
Along Track Resolution		0.17m@50m	0.51m@150m
	0.35m@50m		900kHz
		0.26m@75m	0.07m@20m
			0.17m@50m
			0.26m@75m
Cross Track Resolution	1cm	1cm	2cm@450kHz 1cm@900kHz
Transducer Size	29.2×2.5×2cm	43×2.5×2cm	85×4×2.2cm
Transducer Weight	185g×2	310g×2	1.25g×2

<sup>\*\*</sup>All spec. above is subject to change without notice.

