EofE Ultrasonics Co., Ltd.

Echologger MRS900

Ultra Compact Scanning Sonar

EchoLogger

Features

High resolution sonar with real-time imaging
One of the most compact scanning sonar in the world
Low power consumption
Digital CHIRP Technology
No Wear/Tear Parts (Contactless Rotating Transformer Mechanism)
Versatile connection scheme - Side or bottom
Easy to use - just plug and play
Easy to operate with user friendly GUI software
Fully plastic version available (no corrosion) : MRS900S

Applications

Navigation for ROV/AUV
Underwater Structure Monitoring
Obstacle Avoidance
Diver-held Sonar
Search & Rescue Operations

EchoLogger

Specification

Pulse Type	Chirp, CW
Operating Frequency	~900kHz
Beam Pattern	Fanbeam (2.5°H /25°V)
Range	from 30cm, up to 60m
Range Resolution	7.5 mm @ 100kHz Sampling Frequency
Scanning Angle	Selectable up to 360°
Scan Angle Resolution:	0.1125°, 0.225°, 0.45°, 0.9°, 1.8°
Scan Speed:	4 sec / 360° @ 5 m, Scanning Resolution 0.9°
	6.4 sec / 360° @ Range 10 m and Scanning Resolution 0.9°
	40 sec / 360° @ Range 60 m and Scanning Resolution 0.9°
Transmit Pulse Length	500 us (chirp), 10 - 100us (CW)
Interface	RS232 / RS485 up to 1 Mbaud
Power Requirements	12 - 60 VDC, 4 W max
Cable max length	300m @ 2 Mbaud, 1 km @ 115,200 baud
Connector	MCIL6M(Subconn) or pigtail
Operating Depth	2000 m / 1000m(MRS900L) / 300m(MRS900S)
Material	Hard Anodize Aluminum(MRS900, MRS900L/ Acetal(MRS900S)
Dimensions(mm)	D66 x H76, D64,H75 (MRS900L), D64 x H80 (MRS900S)
Weight	MRS900 :580 / 350g (in air / in water)
	MRS900L : 410 / 190g
	MRS900S : 380 / 140g

EchoLogger

Echologger MRS900 vs. Tritech Micron sonar

	MRS900	Micron	Note
Frequency	900 kHz	700 kHz	
Pulse	Chirp (long range) CW (short range)	Chirp only	MRS transmits more sophisticated tailored pulses, ie., uses CW at short ranges and Chirp at long ranges
Pulse Length	CHIRP : 500µsec CW : 10~ 100µsec	200µsec	
Gain control	±15dB	NA	MRS can control signal gain
Beam angle	2°(H)/ 25°(V)	3°(H)/ 35°(V)	MRS has more resolution with sharper beams (2°)
Range	0.3 ~60m	0.3~75m	Micron covers longer range
Range resolution	Max 7.5mm	Max 7.5mm	Same
Scanning resolution	0.1125°, 0.225°, 0.45°, 0.9°, 1.8°	0.45°, 0.9°, 1.8°	MRS finer angular scanning resolutions (X4)

EchoLogger

Echologger MRS900 vs. Tritech Micron sonar

	MRS900	Micron Sonar	Note
Interface	RS232/RS485	RS232/RS485	Same
Comm. speed	115,200 ~ 921,600 & 1,00,0000 baud (Auto detection)	Max. 115,200 baud	MRS has a higher communication speed (X8)
Power supply	12 - 60 VDC 2W	12-48 VDC @ 4W	MRS has more flexible power supply range with less consumption (50%)
Connector	Side or Bottom	Side only	MRS has a connector either on the side or on the bottom
Depth rate	2,000m/1,000m/300m	750m	MRS can go deeper
Size	D66,H76/D64,H74 (L)/ D66,H80(S)	D56,H79	Micron is smaller in diameter, MRS is smaller in height
Weight	580g(350g water) 410g(190g water) : L 380 (140g water) : S	420g/(180g)	Similarly light

EchoLogger

Product Images

EchoLogger

Product Images

Product Images

MRS900L

Product Images

NEW!
MRS900S

EchoLogger

Product Images

NEW! : **MRS900S**

Product Images (with protection gear)

EchoLogger

Product Images

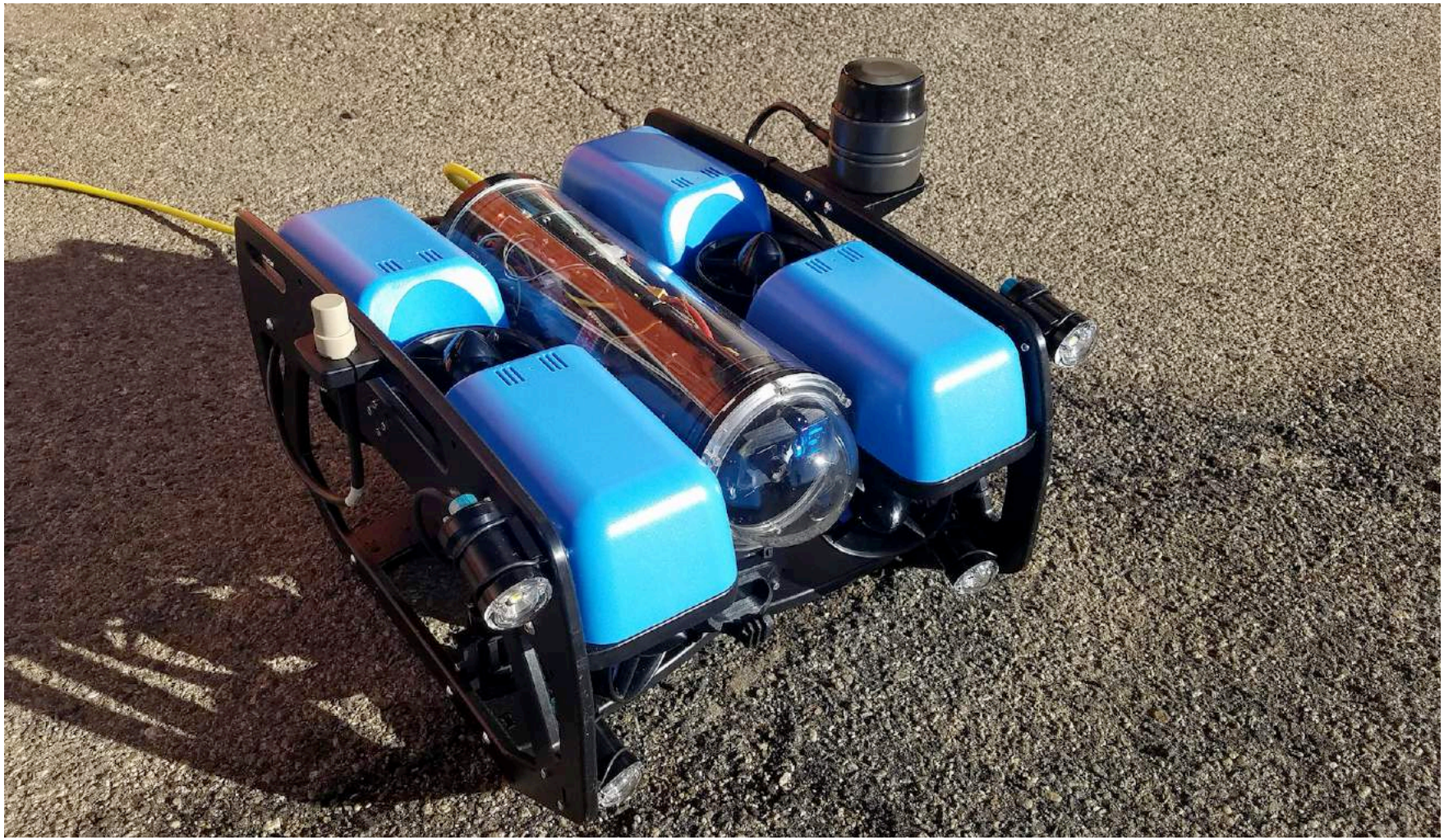
EchoLogger

Product Images

Product Images

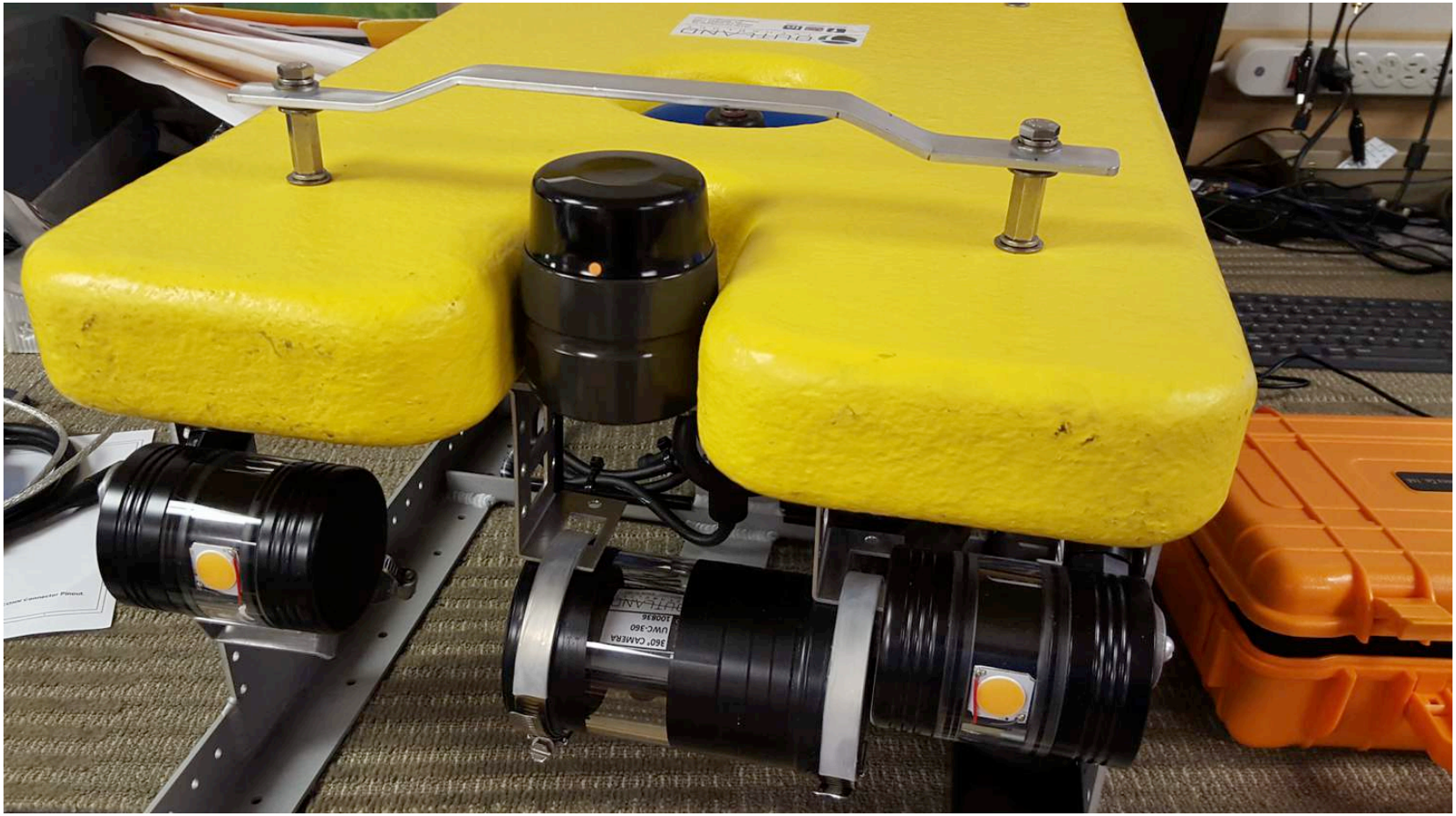
EchoLogger

Product Images



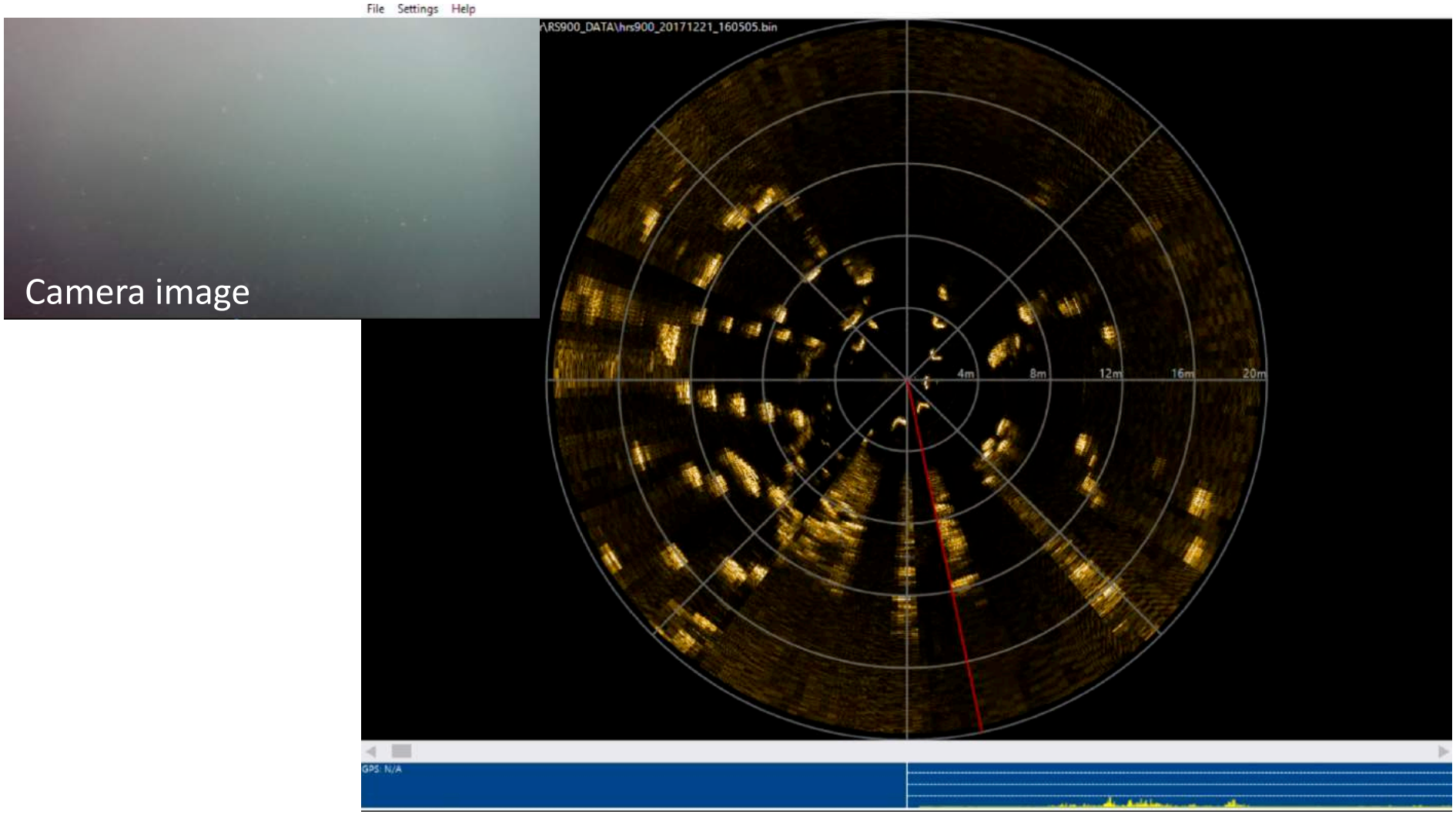
EchoLogger

Product Images



EchoLogger

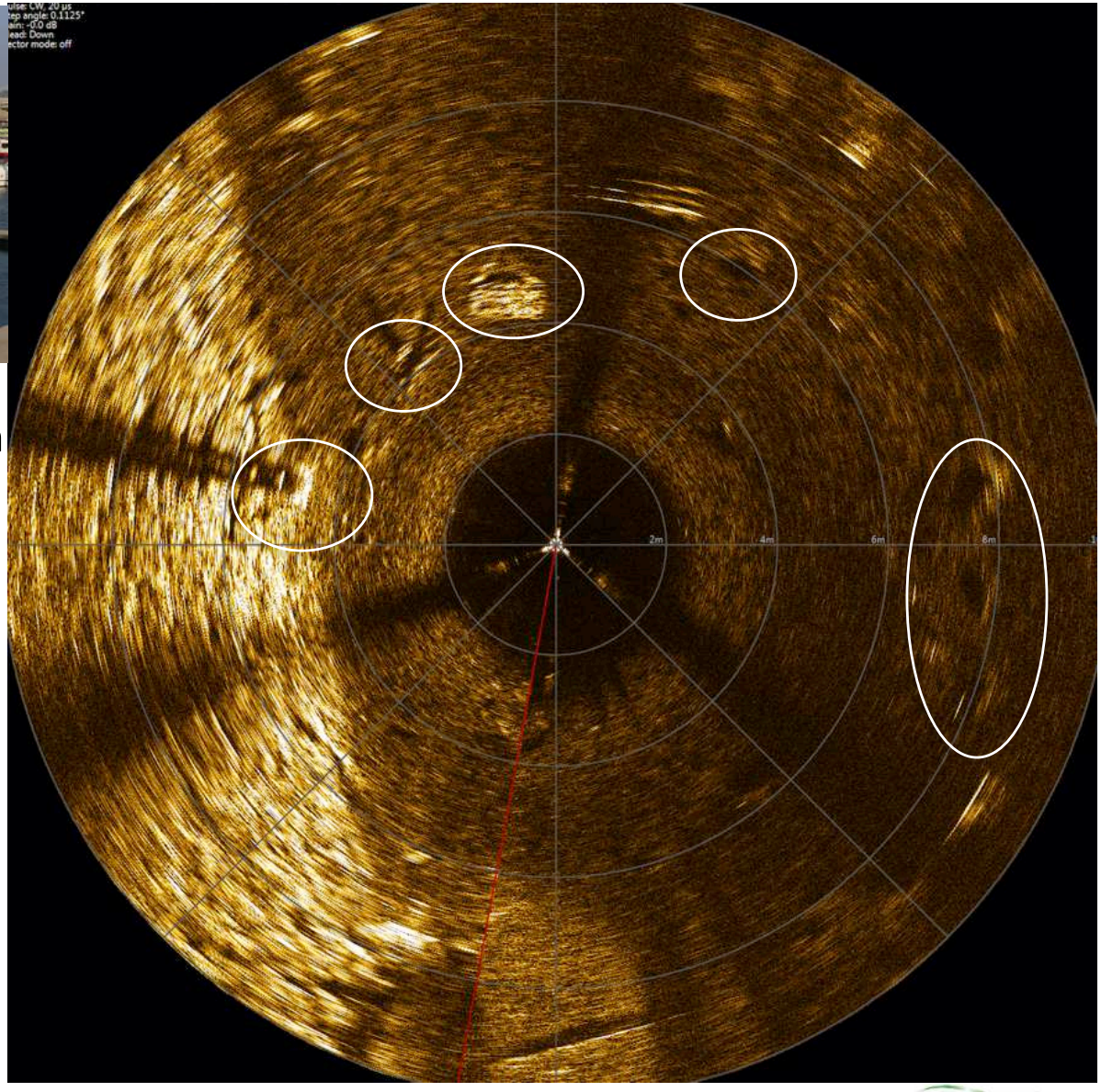
Scanned Images



EchoLogger

Scanned Images

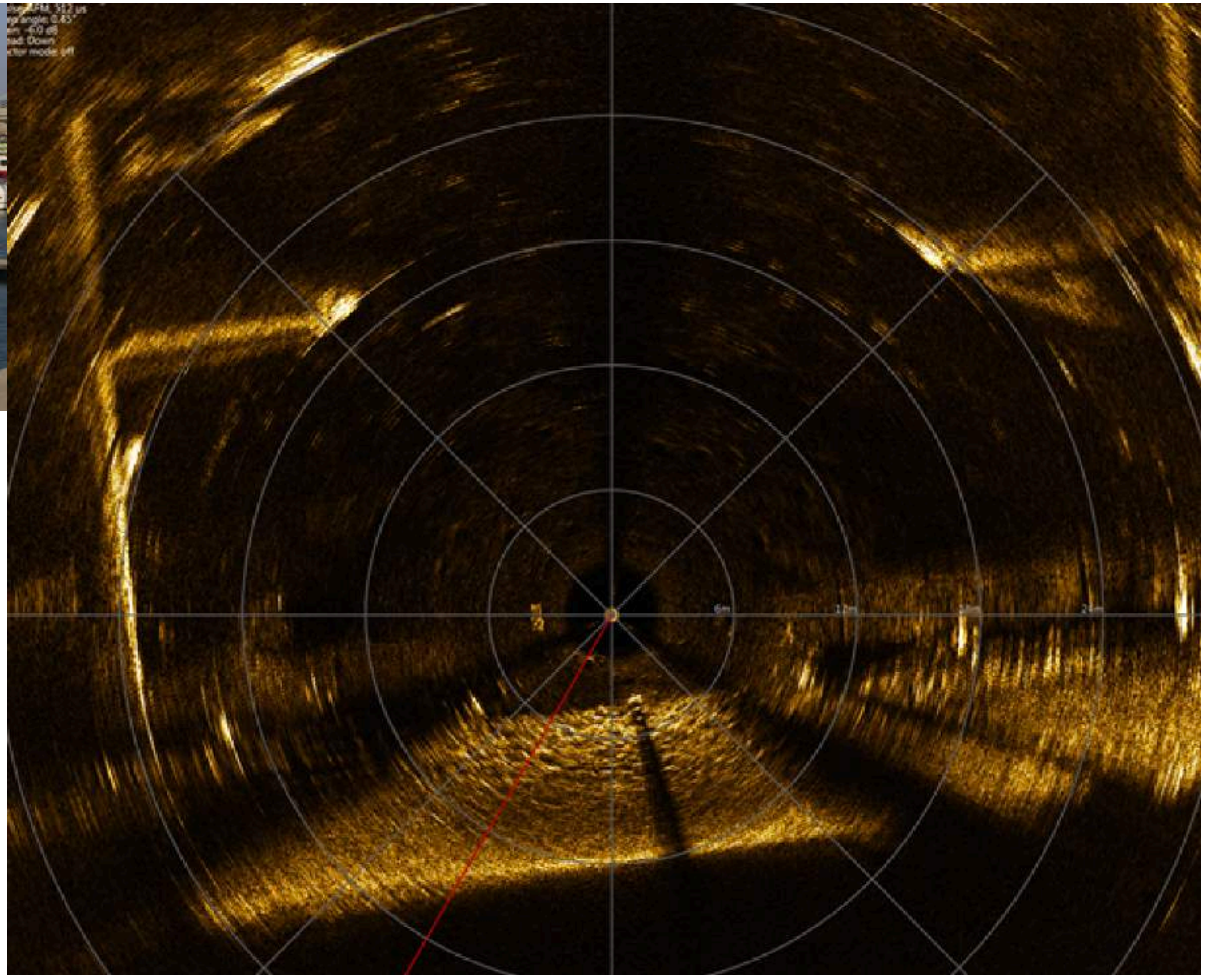
Range 10m



EchoLogger

Scanned Images

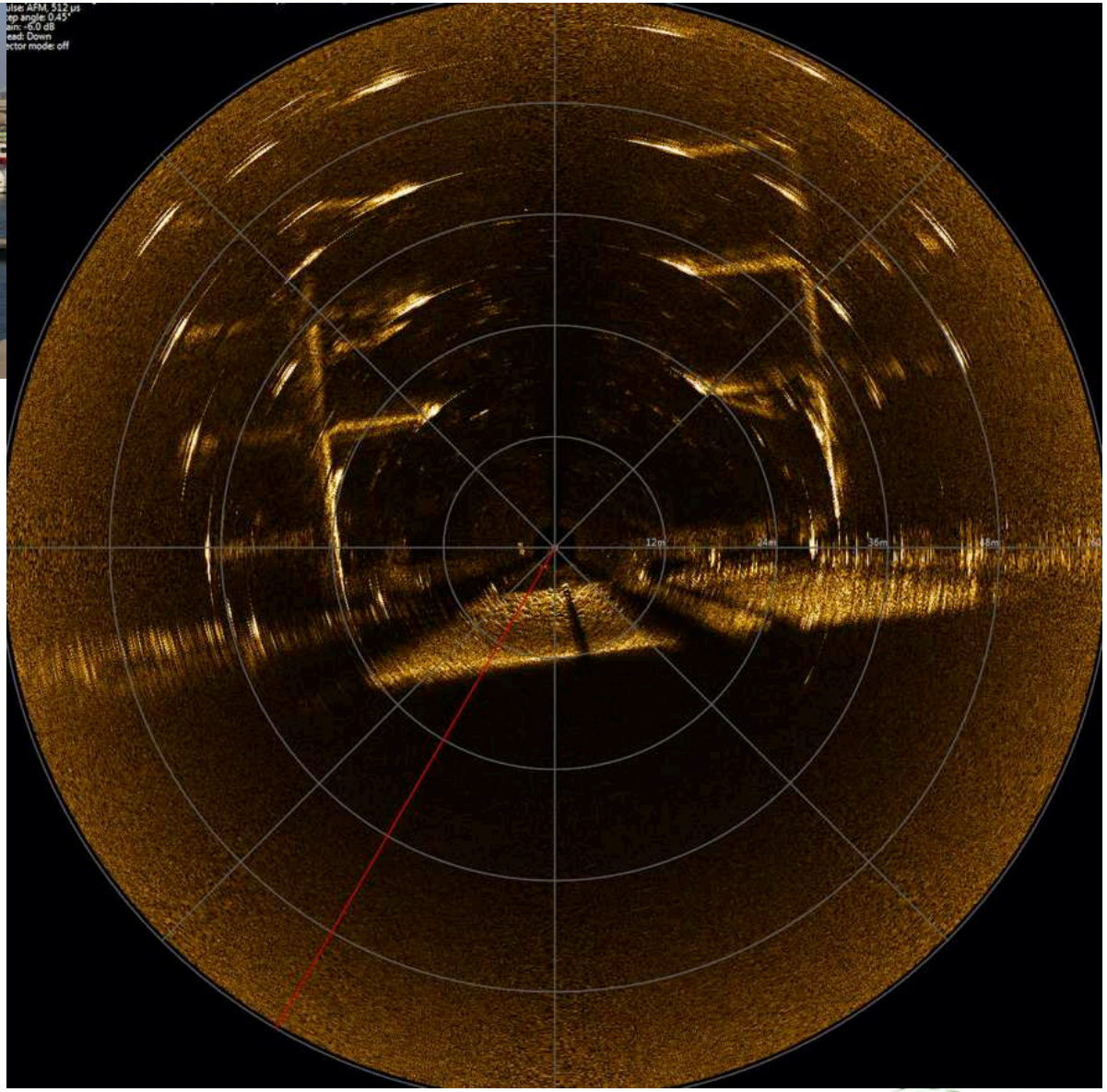
Range 30m



EchoLogger

Scanned Images

Range 60m



EchoLogger

EofE Ultrasonics Co., Ltd.

Echologger MRS900

Ultra Compact Scanning Sonar

EchoLogger