

2205 Series AUV/ROV Sonar



The new EdgeTech 2205 is an extremely flexible and configurable sonar system for unmanned vehicles. It is specially designed for installation and use on Unmanned Underwater Vehicles (UUVs), Remotely Operated Vehicles (ROVs), Unmanned Surface Vehicles (USVs), and other hosted platforms. This modular unit can be configured, based on the customers' application, to collect side scan sonar images, subbottom profiles and bathymetric data, singly or in concert with one another. Careful attention has been paid to size, weight and power consumption. The system is provided as a complete package including transducer arrays, sensors and pressure vessel, or alternatively the core electronics and storage device can be integrated into the AUV or ROV pressure housing. The system can operate independent of the hosted platform by simply recording and storing the data, or it can be configured to autonomously interoperate with the vehicle during its mission.

Specifications

Product	2205 Series AUV/ROV Sonar
Country of origin	USA
Manufacturer	EdgeTech

While EdgeTech supplies its own Discover software on a laptop or rack-mount PC, it is also possible to interface other 3rd Party Topsides. Subsea units can be depth rated to 6000 meters or designed for lighter and shallower operations. The robust and modular 2205 system includes EdgeTech’s unique and exciting underwater imaging technologies: Full Spectrum® CHIRP Processing, Multi-Pulse technology, Dynamically Focused Arrays and Dynamic Aperture Sonar Arrays. Our proprietary Full Spectrum® CHIRP Processing enhances long range resolutions through improved signal-to-noise ratios.

Features

- Unique EdgeTech features!
 - Full Spectrum® CHIRP Processing
 - Multi-Pulse technology
 - Dynamically Focused Arrays
 - Dynamic Aperture Sonar Arrays
- Modular components for custom configurations
- Superior sonar technology combinations
 - Side scan sonar
 - Sub-bottom profiler
 - Bathymetry

2205 Sonar System Options / Choices

Side scan sonar Dual simultaneous frequencies	Sub-bottom Profiler	Bathymetry
75 / 120 kHz	1 - 10 kHz	230 kHz
75 / 410 kHz	2 - 16 kHz	540 kHz
100 / 400 kHz	4 - 24 kHz	
300 / 600 kHz		
230 / 850 kHz Available with Long Range High Definition (DF) Dynamically Focused		
600 / 1600 kHz Available with (DF) Dynamically Focused		

Topside & Software Options

- Subsea
 - Electronics in pressure housing
 - Electronics chassis for vehicle pressure housing
- Topside
 - Laptop PC with DISCOVER software
 - Rack-mount PC with DISCOVER
 - 3rd party equipment and software

Sensor system options

- Magnetometer
- Pitch/ Roll/ Yaw/ Heave/ Heading
- Pressure / Temperature
- USBL / Responder
- Other customer specified.

Side scan sonar frequencies

Frequency	Range
120 kHz	500m
230kHz	300m
410kHz	200m
540kHz	150m
850kHz	75m
1600kHz	35m

2205 Sonar System Options / Choices

	DW-424	DW-216	DW-106
Frequency Range	4 – 24 kHz	2 – 16 kHz	1 – 10 kHz
Vertical Resolution	4 – 8 cm	6 – 10 cm	15 – 25 cm
Penetration (typical)			
In coarse calcareous sand	2 m	6 m	15 m
In clay	40 m	80 m	150 m

Power supplies

- 18v to 36v dc (24v nominal)
- 36v to 60v dc (48v nominal)

Power Consumption

- 15 w + transmit power
- Add between 4 w and 24 w for transmit power