

# 2205

## FEATURES

- Modular components for custom configurations
- Superior Sonar Systems combinations:
  - Side Scan Sonar
  - Sub-Bottom Profiler
  - Bathymetry Echo-Sounder
- Unique Technology features:
  - Nadir Gap-Fill Sonar
  - Full Spectrum® CHIRP Processing
  - Multi-Pulse Technology
  - Motion Tolerant Side-Scan
  - Dynamically Focused Attays
  - Dynamic Aperture Sonar Arrays

## PLATFORMS

- AUV
- ROV
- ROTV
- USV / ASV
- Other hosted platforms

## APPLICATIONS

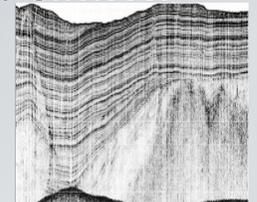
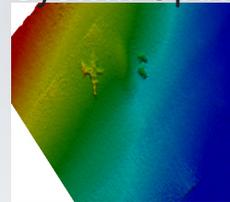
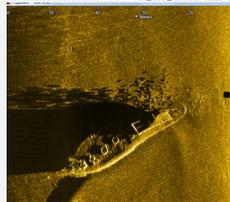
- Archeological Surveys
- Geological/Geophysical Surveys
- Cable and Pipeline Surveys
- Pre/Post Dredging Surveys
- Marine Construction Surveys
- Benthic Habitat Mapping
- Marine Debris Search
- Military Rapid Environmental Assessments
- Port & Harbor Security
- Route Surveys
- Shallow Water Hydrographic Surveys
- Mine Counter Measures (MCM)



Compact Sonar Electronic Package (Housing optional) and Transducers for any Hosted Platform.



## 2205 Sonar System Options / Choices:



| Side Scan Sonar<br>Dual simultaneous frequencies              | Bathymetry<br>Option | Sub-Bottom Profiler |
|---|----------------------|---------------------|
| 75 / 120 kHz  |                      | 1 - 10 kHz          |
| 75 / 410 kHz  |                      | 2 - 16 kHz          |
| 120 / 410 kHz   |                      | 4 - 24 kHz          |
| 230 / 540 kHz   | 540 kHz              |                     |
| 540 / 1600 kHz  | 540 kHz              |                     |
| 850 / 1600 kHz  | 850 kHz              |                     |
| Tri-Frequency<br>230 / 540 / 1600 kHz<br>230 / 850 / 1600 kHz | 540 kHz              |                     |

### Sensor System Options:

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

### Subsea:

- Electronics in pressure housing
- Electronics chassis for vehicle pressure housing
- Transducer arrays

### Topside:

- Laptop PC with DISCOVER software
- Rack-mount PC with DISCOVER
- 3rd party equipment and software

For more information please visit [EdgeTech.com](http://EdgeTech.com)

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# 2205

## || 2205

The 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, sub-bottom 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.

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.

### Side Scan Sonar Frequencies & Ranges

|          |        |
|----------|--------|
| 75 kHz   | 1000 m |
| 120 kHz  | 500 m  |
| 230 kHz  | 300 m  |
| 410 kHz  | 200 m  |
| 540 kHz  | 150 m  |
| 850 kHz  | 75 m   |
| 1600 kHz | 35 m   |

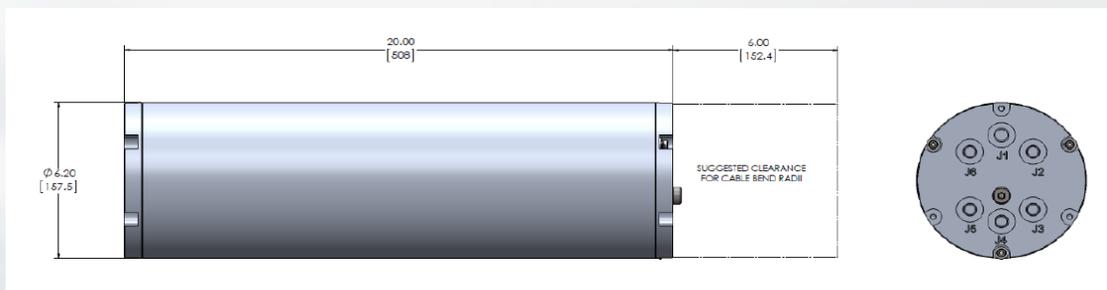
### Sub-bottom Frequencies

| Frequency Range  | 4 - 24 kHz  | 2 - 16 kHz  | 1 - 10kHz     |
|--|-------------|-------------|---------------|
| Vertical Resolution (depends on Pulse selected)            | 4 - 8 cm    | 6 - 10 cm   | 15-25 cm      |
| Penetration (typical)<br>In coarse calcareous sand In clay | 2 m<br>40 m | 6 m<br>80 m | 15 m<br>150 m |

#### Power Supplies

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

Power consumption varies depending on the configuration of side scan sonar, sub-bottom, bathy or combined systems. Contact EdgeTech for details.



EdgeTech 2205 systems are available in a variety of configurations including 3,000 (shown above) and 6,000 meter rated pressure housings or electronics-only versions for installation in customers vehicle electronics sections. Call for details.

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