

# 6205<sup>5</sup>

#### **NEXT GENERATION SWATH BATHYMETRY & SIDE SCAN SONAR**

#### FEATURES & BENEFITS

- · Next generation MPES technology
- Unrivaled swath coverage in shallow water when compared to other single head systems
- Co-registered dual frequency side scan and single frequency bathymetry with full nadir coverage
- · Superior multipath rejection
- · IHO SP-44 Special Order compliant
- Swath sectors of up to 200°
- · Equidistant and Equiangle output options
- · Comes with EdgeTech's Discover
- Bathymetric Sonar Control Software
- · Motion Tolerant Side Scan
- · Universal MRU mounting plate

#### **APPLICATIONS**

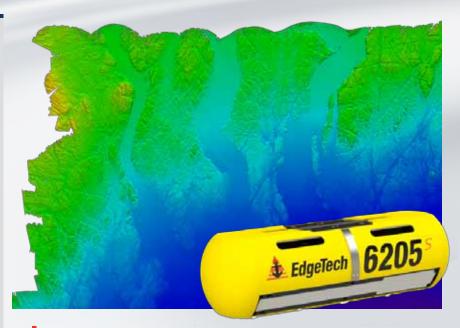
- Shallow Water Hydrographic Surveys
- Benthic Habitat Mapping
- Nautical Charting
- Military Rapid Environmental Assessments (REA)
- Route Surveys
- · Dredging Operations
- · Marine Debris Search
- Port & Harbor Security

#### **III** OPTIONS

The 6205<sup>5</sup> is available in several standard frequency configurations:

- 550 / 1600 kHz (Dual Frequency Side Scan with 550 kHz bathymetry data)
- 550 / 850 kHz (Dual Frequency Side Scan with 550 kHz bathymetry data)
- 230 / 550 kHz (Dual Frequency Side Scan with 550 kHz bathymetry data)
- 230 / 550 kHz (Dual Frequency Side Scan with 230 kHz bathymetry data)

The modular design of the 6205<sup>S</sup> also allows for multi-frequency bathymetry options in a single sonar head. The field exchangeable array capability allows both shallow and deep water operations.



The EdgeTech 6205<sup>S</sup> is a fully integrated Swath Bathymetry and Dual Frequency Side Scan Sonar System that produces real time, high resolution, side scan imagery and three-dimensional maps of the seafloor. The 6205<sup>S</sup> overcomes the limitations of Multi Beam Echo Sounders (MBES) and Interferometric systems in shallow water by using EdgeTech's unique Multi-Phase Echo Sounder (MPES) technology. This Hybrid approach combines both Beamforming and Phase Discrimination techniques to determine each sounding along the seafloor. With the integration of EdgeTech's Full Spectrum® CHIRP technology, the 6205<sup>S</sup> exceeds IHO SP-44, NOAA, and USACE specifications for Feature Detection and Bathymetric Point Data Uncertainty.

EdgeTech's MPES technology enables the 6205<sup>5</sup> to produce wider and cleaner swath (over 200°) than current technologies, resulting in superior coverage enabling faster and safer survey completion. At the same time, the 6205<sup>5</sup> rejects multipath effects, reverberation, and acoustic noise commonly encountered in shallow water environments.

Additionally, EdgeTech's latest 2205 Electronics and Modular Arrays are utilized in the 6205<sup>5</sup>, resulting in an extremely lightweight design, which is required for shallow water applications and vessels of opportunity.

The standard configuration for the 6205<sup>s</sup> includes an integrated Sound Velocity Sensor, and interfaces to most Third-Party acquisition and processing software packages, as well as to standard GPS, MRU, SVP, Gyros, and INS.

For more information please visit <a href="EdgeTech.com">EdgeTech.com</a>



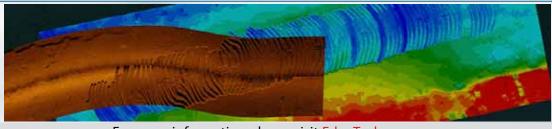
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## KEY SPECIFICATIONS

BATHYMETRY								
Sonar Frequency			230 kHz				550 kHz	
Beamwidths*			1° x 0.7°				1° x 0.5°	
Optimal Operating Depth**			<100 m				< 50 m	
Max Swath Width***			400 m				200 m	
Max Swath Sector		200°						
Max Number of Soundings		800						
Sounding Patterns		Equidistant and Equiangular						
SIDE SCAN SONAR IMAGERY								
Frequency		230 kHz		550 kHz		850 kHz		1600 kHz
Horizontal Beamwidth (2-way)		0.54°		0.36°		0.29°		0.20°
Range Resolution		30 mm		10 mm		9 mm		6 mm
Max Range**		250 m		150 m		75 m		35 m
SYSTEM								
Pulse Modulation		CW & FM CHIRP						
Ping Rate (Range Dependent)		Up to 60 Hz						
Construction		Polycarbonate / 316 Stainless Steel Frame						
Dimensions		208 x 244 x 759 mm (8.1 x 9.6 x 29.8 in)						
Deck Cable Length		20m (Standard)						
Depth Rating		50 m						
Weight (In Air)		20 kg (44 lbs)						
Input Voltage		48-60 VDC, 115-230VAC						
Power (Typical /Max)		55W / 70W						
Software		Windows based software included EdgeTech's Discover Bathymetric Acquisition and Sonar Control						
Data Products		Bathymetry, Backscatter and Side Scan Imagery, and Real Time Uncertainties						
* Across track resolution expressed as a bea	mwidth at nadir							

\* Across track resolution expressed as a beamwidth at nadir \*\* Dependent on environmental conditions (i.e. absorption, reverberation, sea noise, etc.) \*\*\* Assumes a flat seafloor and dependent on environmental conditions



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