

# 6205

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

#### FEATURES & BENEFITS

- Next Generation EdgeTech Bathymetric technology
- Wide swath coverage in shallow water, up to 12 times water depth
- Co-registered dual frequency side scan and bathymetry with full nadir coverage
- · Improved Depth Performance
- · New lightweight Sonar head
- Superior Multipath and surface reflection suppression
- IHO SP-44 Special Order compliance with proven results
- Over 200° view angle with no nadir gap
- Equidistant and Equiangle output options

#### **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

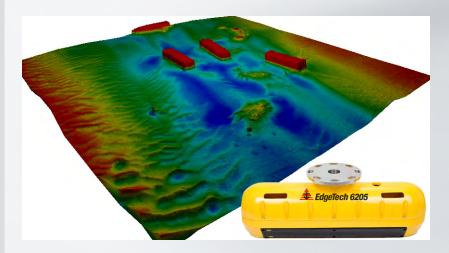
#### **OPTIONS**

The 6205 is available in several standard frequency configurations:

- 550 / 1600 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 also allows for multi-frequency bathymetry options with field exchangeable array design for survey operations in both shallow and deep water operations.

The 6205 utilizes EdgeTech's next generation bathymetric technology to provide an enhanced and fully integrated, swath bathymetry and dual frequency side scan sonar system. The 6205 produces real-time, high resolution, three dimensional (3D) maps of the seafloor while providing co-registered simultaneous dual frequency side scan imagery.



The 6205 uses ten receive element transducers and one discrete transmit element. The high number of channels enables superior rejection of multipath effects, reverberation and acoustic noise commonly encountered in the shallow water survey environment.

Utilizing EdgeTech's Full Spectrum\* technology, the 6205 exceeds IHO SP-44, NOAA and USACE specifications for feature detection and bathymetric point data uncertainty. Near shore and shallow water hydrographic surveys are completed faster and safer utilizing the 6205 due to the wide swath (over 200° view angle), which is typically more than three times that of existing sonars that rely solely on beam forming techniques.

The 6205 utilizes EdgeTech's latest electronics and arrays resulting in an extremely lightweight, modular design required for shallow water applications and vessels of opportunity.

The standard configuration for the 6205 includes an integrated sound velocity sensor and interfaces with standard GPS, MRU, SVP, CTD, Altimeters and Gyros. The 6205 interfaces to most 3rd party acquisition and processing software as well.

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

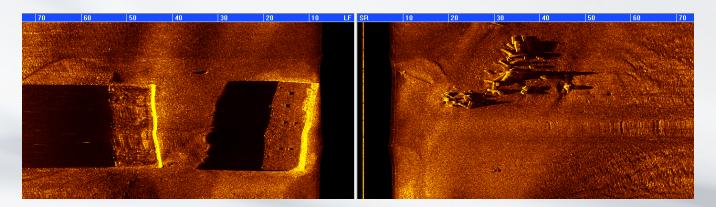


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## KEY SPECIFICATIONS

SYSTEM						
Sonar Frequency	230 kHz		550 kHz		1600 kHz	
Bathymetric Swath Coverage	12 times Altitude, Max 350 m Swath		12 times Altitude, Max 150 m Swath		NA	
Bathymetric Range Resolution	3 cm		1 cm		NA	
Bathymetric Vertical Resolution	3 cm		1 cm		NA	
Side Scan Swath Coverage	450 m		250 m		70 m	
Side Scan Range Resolution	3 cm		1 cm		0.6 cm	
Side Scan Horizontal Beamwidth	0.64 deg		0.50 deg		0.20 deg	
Max Pulse Bandwidth	40 kHz		67 kHz		145 kHz	
Ping Rate (Both Sides Simultaneously)	60 Hz		150 Hz		150 Hz	
Max Depth Below Transducers	215 m		75 m		12 m	
Pulse Length	25 μs to 4 ms		15 μs to 3.7 ms		120 μs to 1.1 ms	
SONAR						
Pulse Modulation	CW & CHIRP					
Array Elements	1 Transmit / 10 Received					
Construction	FRP Composite / Stainless Steel Reinforced					
Diameter	27.9 cm (11 in)					
Width	21.1 cm (8.3 in)					
Length	76.2 cm (30 in)					
Weight (In Air)	19.9 kg (44 lbs)					
Power Requirements	100 Watts, 48 VDC					



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