4205

The next generation 4205 is a versatile side scan sonar system that can be configured for almost any survey application from shallow to deep water operations. The 4205 utilizes EdgeTech's Full Spectrum® CHIRP technology to provide crisp, high resolution imagery at ranges up to 50% greater than non-CHIRP systems; thus allowing customers to cover larger areas and save money spent on costly surveys. In addition to the high-resolution imagery that EdgeTech is known for, the 4205 comes with a number of new features which makes the system even more flexible and powerful in offshore operations. The 4205 is available in either a tri-frequency side scan sonar configuration or motion tolerant and multi-pulse configuration. The tri-frequency version allows surveyors the option to operate any two frequencies simultaneously from the tri-frequency system. Long range operations for example can be achieved with a selection of 230/540 kHz combination. Then, on-demand the system can be changed to a 540/850kHz system for an even higher resolution survey.

The 4205 motion tolerant configuration with multi-pulse provides surveyors the ability to operate either at faster survey speeds or in more adverse weather conditions while still obtaining high quality underwater imagery. In both the tri-frequency and motion tolerant/ multi-pulse configurations, towfish and target positioning has been improved with the integration of a more accurate heading sensor. Additionally, all systems now come with increased towfish power to support a wider range of additional 3rd party sensors. All EdgeTech 4205 systems are comprised of a topside system and a reliable stainless steel towfish. Topside processors are rack mountable and come with easy-to-use GUI software that can be installed on the optional industrial workstation, laptop or customer provided PC.

Specifications

Product	4205
Country of origin	USA
Manufacturer	EdgeTech

Key specifications

Sonar specifications	4205 Tri-frequency	4205 Multi-pulse/motion tolerant	
Frequency	Choice of either 120/410/850 kHz or 230/540/850 kHz	Choice of either 120/410 kHz, 230/540 kHz 850 kHz: 90 meters/side	
Operating Range (meters/side)	120 kHz: 600m, 230 kHz: 350m, 410 kHz: 200m, 540 kHz: 150m, 850 kHz: 90m		
		MP/MT	**HDM**
Horizontal Beam Width	120 kHz: 0.70° 230 kHz: 0.44° 410 kHz: 0.28° 540 kHz: 0.26° 850 kHz: 0.23°	120 kHz: 0.95° 230 kHz: 0.62° 410 kHz: 0.40° 540 kHz: 0.36° 850 kHz: 0.33°	0.70° 0.44° 0.28° 0.26° 0.23°
		MP/MT	**HDM**
Resolution Along Track	120 kHz: 2.4m @ 200m 230 kHz: 1.2m @ 150m 410 kHz: 0.5m @ 100m 540 kHz: 0.45m @ 100m 850 kHz: 0.20m @ 50m	120 kHz: 3.3m @ 200m 230 kHz: 1.7m @ 150m 410 kHz: 0.7m @ 100m 540 kHz: 0.6m @ 100m 850 kHz: 0.26m @ 50m	2.4m @ 200m 1.2m @ 150m 0.5m @ 100m 0.45m @ 100m 0.20m @ 50m
Resolution Across Track	120 kHz: 8cm; 230 kHz: 3cm; 410 kHz: 2 cm; 540 kHz: 1.5cm; 850 kHz: 1cm		
Vertical Beam Width		50°	
Depression Angle		Tilted down 25°	

Towfish

Diameter	12cm (4.75 inches)
Length	140cm (55 inches)
Weight in air	52 kg (115 pounds)
Depth rating (Max)	2,000m
Standard sensors	Heading, pitch & roll
Optional sensor port	(1) Serial – RS 232C, Bi-directional & 28 VDC +/- 4%
Options	Pressure Sensor, Magnetometer interface, USBL Responder interface, Depressor, Power Loss Pinger and Custom Sensors

Topside processor

Hardware	19” rack mount interface (150 watt or 400 watt)
Display & Interface	Optional industrial workstation, laptop or customer provided PC
Power Input	115/230 VAC
Sensor Interfaces	Ethernet, RS 232
File format	Native JSF or XTF
Tow Cable	Coaxial Kevlar or double-armored up to 6,000m, winches available