4200 Series
Side scan sonar system

The 4200 Series is a versatile side scan sonar system that can be configured for almost any survey application from shallow to deep water operations. The 4200 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.

One of the unique features of the 4200 is the optional Multi-Pulse (MP) technology, which places two sound pulses in the water rather than one pulse like conventional side scan sonar systems. This allows the 4200 to be towed at speeds of up to 10 knots while still maintaining 100% bottom coverage. In addition, the MP technology will provide twice the resolution when operating at normal tow speeds, thus allowing for better target detection and classification ability. The addition of the optional MP technology provides the operator with two modes of operation; either High Definition Mode (HDM) or High Speed Mode (HSM). This software-selectable mode of operation provides the operator the ability to select the best configuration for the specific job type.

All EdgeTech 4200 systems are comprised of a topside system and a reliable stainless steel towfish. A choice of dual simultaneous frequency sets are available to the user and topside processors come in a choice of configurations from portable to rack mounted units. In addition, an easy-to-use GUI software is supplied with every unit.

Specifications

Product	4200 Side scan sonar system
Country of origin	USA
Manufacturer	EdgeTech

Sonar

	Standard	With optional MP technology	
Frequency	Choice of either 100/400, 300/600 or 300/900 kHz dual simultaneous		
Operating Range (meters/side)	100 kHz: 500m, 300 kHz: 230m, 400 kHz: 150m, 600 kHz: 120m, 900 kHz: 75m		
Horizontal beam width:	100 kHz: 1.5°, 300 kHz: 0.5°, 400 kHz: 0.4° 600 kHz: 0.26°, 900 kHz: 0.2°	In High Speed Mode: 100 kHz: 1.26°, 300 kHz: 0.54°, 400 kHz: 0.4°, 600 kHz: 0.34°,900 kHz: 0.3° In High Definition Mode: 100 kHz: 0.64° 300 kHz: 0.28°, 400 kHz: 0.3°, 600 kHz: 0.26°,900 kHz: 0.2	
Resolution along track	100 kHz: 5 m @ 200 m 300 kHz: 1.3 m @ 150 m 400 kHz: 0.6 m @ 100 m 600 kHz: 0.45 m @ 100 m 900 kHz: 18 cm @ 50 m	High Definition Mode: 100 kHz: 2.5m @ 200m 300 kHz: 1.0m @ 200m 400 kHz: 0.5m @ 100m 600 kHz: 0.45m @ 100m 900 kHz: 18 cm @ 50m	High Speed Mode: 100 kHz: 4.4m @ 200m 300 kHz: 1.9m @ 200m 400 kHz: 0.7m @ 100m 600 kHz: 0.6m @ 100m 900 kHz: 26 cm @ 50m
Resolution across track	100 kHz: 8 cm, 300 kHz: 3 cm, 400 kHz: 2 cm, 600 kHz: 1.5 cm, 900 kHz: 1 cm		
Vertical beam width	50°		
Depression angle	Tilted down 20°		

Towfish

	Stainless Steel
Diameter	11.4 cm (4.5 inches)
Length	125.6 cm (49.5 inches)
Weight in air/saltwater	48 / 36 kg (105 / 80 pounds)
Depth rating (Max)	2,000m
Standard sensors	Heading, pitch & roll
Optional sensor port	(1) Serial – RS 232C, 9600 Baud, Bi-directional & 27 VDC
Options	Pressure Sensor, Magnetometer, Integrated USBL Acoustic Tracking System, Built-in Responder Nose, Depressor, Power Loss Pinger and Custom Sensors

Topside processor

	4200-P	4200	701-DL Interface
Hardware	Portable splash-proof case	19" rack mount computer	19" rack mount interface
Display & interface	Splash-proof laptop	21" flat panel monitor, keyboard & trackball	Customer-supplied
Power input	20-36 VDC or 115/230 VAC	115/230 VAC	115/230 VAC
Operating system	Windows© XP Pro		
File format	Native JSF or XTF		
Output	Ethernet		
Tow cable	Coaxial Kevlar or double-armored up to 6,000m, winches available		