

4125

Side scan sonar system



EdgeTech's 4125 Side Scan Sonar System was designed with both the Search & Recovery (SAR) and shallow water survey communities in mind. The 4125 utilizes EdgeTech's Full Spectrum® CHIRP technology, which provides higher resolution imagery at ranges up to 50% greater than non-CHIRP systems operating at the same frequency. This translates into more accurate results and faster surveys, thus cutting down on costs.

Two dual simultaneous frequency sets are available for the 4125 depending on the application. The 400/900 kHz set is the perfect tool for shallow water survey applications, providing an ideal combination of range and resolution. The 600/1600 kHz set is ideally suited for customers that require ultra high resolution imagery in order to detect very small targets (SAR).

There are two towfish options for the system; one with telemetry and one without. The towfish with added telemetry provides the ability to operate over longer tow cable lengths for operation in deeper waters. Both frequency sets are available for either towfish.

Specifications

Product	4125 Side scan sonar system
Country of origin	USA
Manufacturer	EdgeTech

The 4125 system can be powered by both AC and DC for added versatility and is delivered in portable rugged cases for ease of transport from site-to-site. As is standard with all of EdgeTech's towed side scan systems, the 4125 comes with a safety recovery system which will prevent the loss of a towfish if it becomes snagged on an obstacle during a survey.

A standard 4125 System comes with a choice of towfish and a portable water resistant topside processor with a splash-proof, drop & shock resistant laptop computer including EdgeTech's easy-to-use Discover acquisition software. A 50m Kevlar tow cable is included as standard with customer-specified lengths also available. Multiple options are available such as a vertical depressor, keel weight, pole mount and hull scan bracket for added versatility.

Sonar

Frequencies (Dual Simultaneous)	Choice of either a 400/900 kHz or 600/1600 kHz towfish
Pulse type	EdgeTech's Full Spectrum® CHIRP (user-selectable CW pulses also included)
Operating range	150m @ 400 kHz, 75m @ 900 kHz; 120m @ 600 kHz, 35m @ 1600 kHz
Horizontal beam width	0.46° @ 400 kHz, 0.28° @ 900 kHz; 0.33° @ 600 kHz, 0.20° @ 1600 kHz
Vertical beam width	50°
Resolution across track	400 kHz: 2.3 cm, 900 kHz: 1.5 cm, 600 kHz: 1.5 cm, 1600 kHz: 0.6 cm

Towfish

	4125 Towfish	4125 Towfish with added telemetry*
Length	97 cm (38 inches)	112 cm (44 inches)
Diameter	9.5 cm (3.75 inches)	9.5 cm (3.75 inches)
Max depth rating of towfish	200m	
Weight in air	15 kg (34 pounds)	20 kg (44 pounds)
Standard sensors	Heading, Pitch, Roll, Pressure (Depth)	
Tow cable type	Multi-conductor up to 150m max length (will provide a typical operational depth down to 50m)	Coaxial up to 600m max length (will provide a typical operational depth down to 200m)
Material	Stainless Steel	

Splash-proof topside processor

Power input	12-24 VDC or 115/230 VAC, 50/60 Hz
Connections	AC, DC, Ethernet (to laptop), Towfish
Hardware	Ruggedized splash-proof, drop & shock resistant laptop
Operating system	Windows® XP
Acquisition software	EdgeTech DISCOVER
System options	Keel weight, vertical depressor wing, pole mount, quick change hull scan bracket