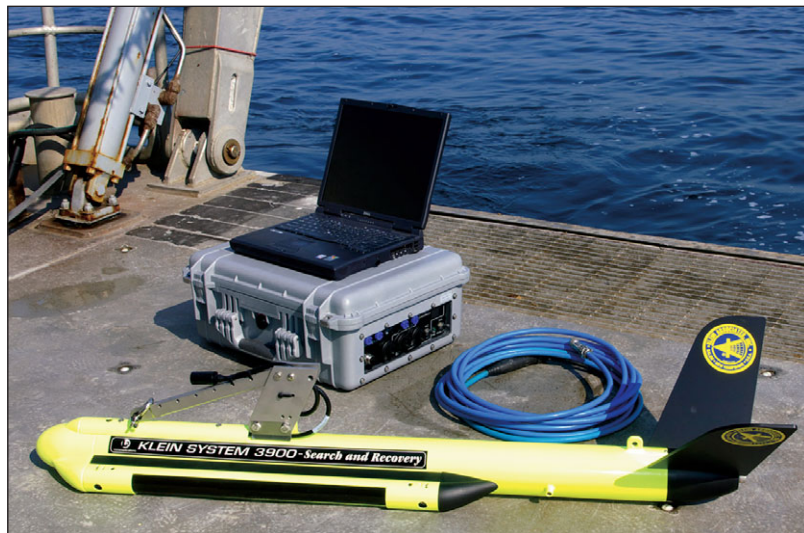




The Difference is in the Image

# System 3900

## Dual-Frequency Side Scan Sonar for Search and Recovery



### Features

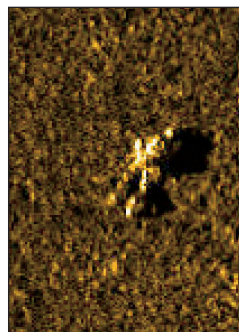
- Very high resolution and long range images
- Lightweight, one-man portable — ideal for small open boat operations
- Special software features for target analysis
- Complete turnkey system ready for field use
- Cost-effective
- Selectable dual-frequency operation (445 kHz and 900 kHz)
- Phosphorescent finish
- Laptop & wireless LAN compatible

The System 3900 is extremely high resolution digital sonar for use in Search and Recovery missions which require a portable side scan system. The model is a selectable dual-frequency system with 445 kHz, which offers excellent range and resolution, and 900 kHz, which offers higher resolution of identified targets.

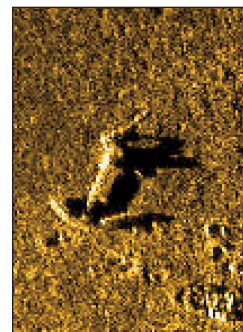
The system is competitively priced and configured to be operated by one man from a small boat in shallow water. The standard system configuration comes complete with a splash-proof Transceiver Processing Unit (TPU), custom-configured laptop and 50m of lightweight tow cable. The Model 3900 Towfish electronics are housed in a stainless steel body with a phosphorescent finish.



Plane



Drowning Victim



Anchor





### SonarPro® Software

Custom-developed software by users and for users of Klein side scan sonar systems operating on Windows XP®. Field-proven for many years. SonarPro® is a modular package combining ease of use with advanced sonar features.



- Basic Modules** Main Program, Data Display, Target Management, Navigation, Data Recording & Playback, and Sensor Display.
- Multiple Display Windows** Permits multiple windows to view different features as well as targets in real time or in playback modes. Multi-windows for sonar channels, navigation, sensors, status monitors, targets, etc.
- Navigation** Permits underlay of electronic charts.
- Survey Design** Quick & easy survey setup with ability to change parameters, set tolerances, monitor actual coverage, and store settings.
- Target Management** Independent windows permitting mensuration, logging, comparisons, filing, classification, positioning, time & survey target layers, and feature enhancements. Locates target in navigation window.
- Sensor Window** Displays all sensors in several formats (includes some alarms) and responder set up to suit many frequencies and ping rates.
- Networking** Permits multiple, real-time processing workstations via a LAN including "master and slave" configurations.
- "Wizards"** To help operator set up various manual and default parameters.
- Data Comparisons Real Time** Target and route comparisons to historical data.

## Specifications

Towfish	
Frequencies	445 kHz 900 kHz
Beams	Horizontal: 0.21° @ 900 kHz, 0.21° @ 445 kHz; Vertical: 40°
Beam tilt	5, 10, 15, 20, 25° down, adjustable
Range scales	12 settings: 10 to 200 meters
Maximum range	150 meters @ 445 kHz; 50 meters @ 900 kHz
Depth rating	200 meters standard
Construction	Stainless steel / fluorescent powder coat
Size	122 cm long, 8.9 cm diameter
Weight	29 kg in air
Standard sensors	Roll, pitch, heading
Options	Pressure sensor
Splash-proof Transceiver Processor Unit (TPU)	
Operating system	VxWorks® with custom application
Outputs	100 Base-Tx, Ethernet LAN, optional w/ LAN
Navigation input	NMEA 0183
Power	120 watts @ 120/240 VAC, 50/60 Hz (includes Towfish)
Interfacing	Interfaces to all major Sonar Data Processors
Splash-proof	To IP 65 with waterproof connectors
Klein Sonar Workstation	
Basic operating system	Windows XP®
Sonar software	SonarPro®
Data format	SDF or XTF or both, selectable
Hardware	Laptop
Options	Optional ruggedized laptop
Tow Cables	
	Lightweight 50m cable; optional armored steel cables

