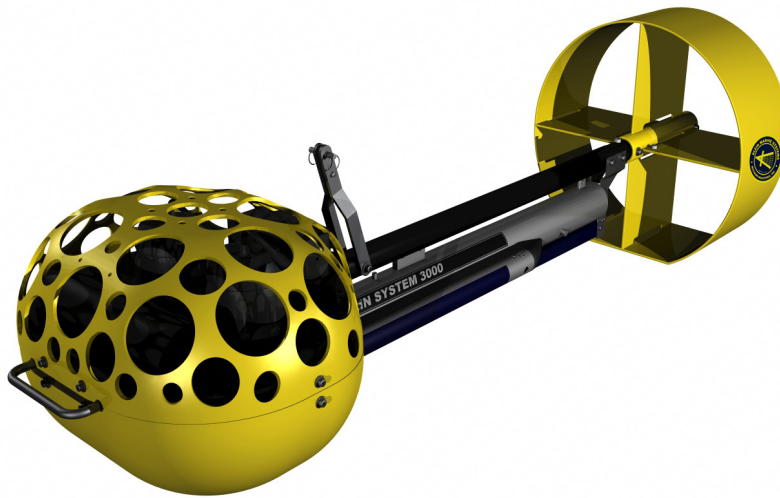


K-CHIRP MODEL 3310 SUB BOTTOM PROFILER

FOR COMBINED USE WITH MODEL 3000 SIDE SCAN SONAR



The K-Chirp Model 3310 SPB is a “Chirp” sub bottom profiler attachment for the Model 3000 Side Scan Sonar. It mounts directly to the Model 3210 Side Scan towfish and uses the existing physical connections and electrical communications to accommodate this added capability.

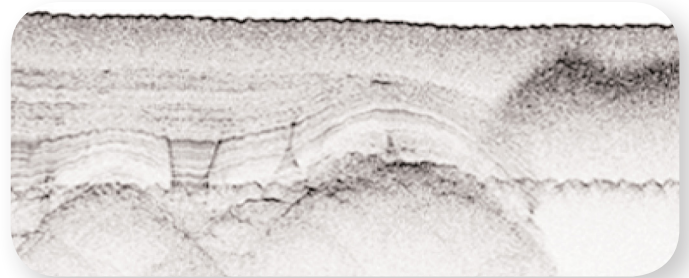
This option takes advantage of the existing Model 3000 side scan hardware.

The Model 3310 SBP consists of a subsea assembly which contains the transmit projectors, receive hydrophone, and SBP electronics. There are separate transmit and receive elements. These components are enclosed in a fiberglass shroud with an integrated support structure to allow for combined transducer / electronics mounting and towing. The Model 3210 tow vehicle is installed into the rear portion of the shroud assembly where it interconnects with the SBP electronics through a jumper cable.

The amplifier is able to modulate both amplitude and phase of the transmit waveform for pulse lengths up to 30 msec and resolution to 12.5 cm.

Applications:

- Cable & Route Surveys
- Geophysical and Geological Surveys
- EEZ Surveys
- Sediment Classification
- Buried Objects, Cables and Pipelines
- Dredging Surveys
- Hazards Surveys



Sediment Layers, Bedrock and Trapped Gas Layer on Right

The Difference Is In The Image

K-CHIRP MODEL 3310 SUB BOTTOM PROFILER

FOR COMBINED USE WITH MODEL 3000 SIDE SCAN SONAR

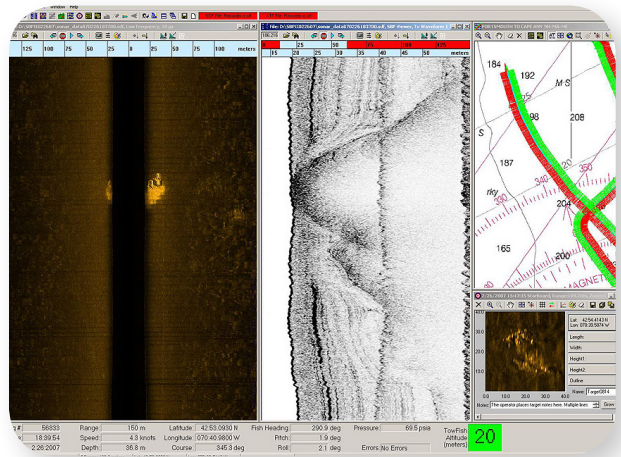
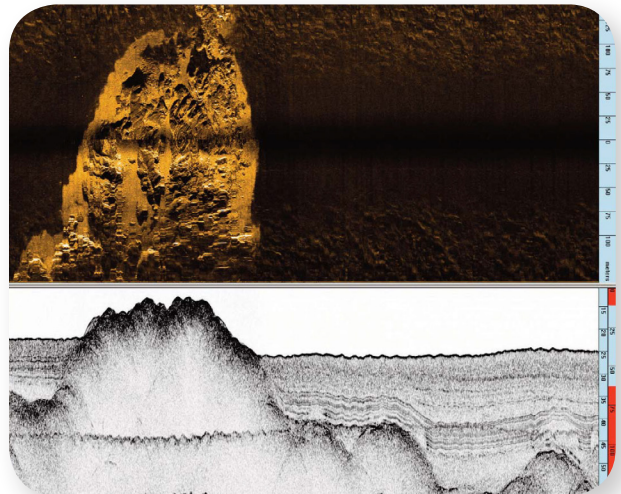


Specifications:

Model 3310 Sub Bottom Profiler	
Host Sonar	System 3000 Side Scan Sonar
Frequency (Chirp)	2-8 kHz
Beam	20° @ 5 kHz along track 40° @ 5 kHz cross track
Selectable Pulses (sync to side scan rate)	to 30 PPS
Selectable Pulse Lengths	2.5, 10, 20 30 msec (limited by side scan range scale)
Resolution	to 12.5 cm
Power	1 KW (peak)
Source Level	204 dB re 1μPa @ 1 m
Depth Rating	600 m
Weight	93 kg (204 lbs) / 56 kg (123 lbs) (In air/in water)
Software	SonarPro®
Tow Cable	Single 50 ohm Coax
Data Format	SDF, XTF, SEG-Y
Sea Ben Penetration	5-50 m, variable depending upon soil density
Digitization	24 bit A/D

Options & Accessories

Model 3310 Sub Bottom Profiler
Pressure Depth Sensor
USBL Responders
Magnetometer Interface
Complete Towing Arrangements Including Winch, Slip Ring, Deck Cable, etc.



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