



SSR, Inc.

Science & Technology in a Marine Environment

Edgetech SB-216S Sub-Bottom Profiler

Edgetech's X-Star SB-216S is a wideband FM high-resolution sub-bottom profiler. Full Spectrum™ technology has several advantages over conventional systems, including increased penetration with high resolution through use of matched filter correlation and waveform weighting techniques.



Features include:

- 6 cm or better resolution
- Matched filter correlation
- Real-time sediment classification
- 20-30dB improved SNR using swept FM pulse
- No spatial side-lobes
- Direct path deconvolution improves SNR 40dB

Technical Specifications

Digital Signal Processor

Pulse Trigger	External or set at an internal rate
Pulse Repetition Rates	0.5 to 8 Pulses/sec for full data acquisition of 120 ms (12pulses/sec 90ms)
Output power	2 kW
Depth rating	300 m
Navigation	NMEA 183 interface, pre-planned track-lines, sonar position, Event/fix Marks, Classification Colour, Navigation set-up utility.

X-Star Sb-216s Tow Vehicle

Pulse Type	FM with amplitude and phase weighting
Frequency Range	2 – 16 kHz
Vertical Resolution	10cm 2-10kHz
100/BW = resolution in cm	8cm 2-12kHz 6cm 2-15kHz
Penetration in meters (typical)	
Course calcareous sands	8 m
Clay	100 m
Beam Width (depends on centre frequency)	15° to 20°