3300

HULL MOUNT SUB-BOTTOM PROFILING SYSTEM

FEATURES

- Superior Sub-bottom images
- Wideband Full Spectrum CHIRP sub-bottom technology
- Multiple configuration options
- Full ocean depth capabilities
- Increased penetration and high resolution

APPLICATIONS

- EEZ coastal planning and resource development
- Geo-technical surveys
- Hazard surveys
- Geohazard Surveys
- Environmental site investigations
- Geological studies
- Sediment classification
- Geophysical surveys

The EdgeTech 3300 hull mount sub-bottom profiling system is a versatile wideband Frequency Modulated (FM) sonar that generates cross-sectional images of the seabed and collects digital normal incidence reflection data over many frequency ranges. EdgeTech's Full Spectrum® Technology has several distinct advantages over conventional sub-bottom systems, including increased penetration and higher resolution. The tapered waveform spectrum, results in images that have virtually constant resolution with depth. Another Full Spectrum advantage is the reduction of side lobes in the effective transducer aperture. The wide bandwidth of the sweep frequency has an effect of smearing the side lobes of the transducer. The result is a beam pattern with almost no side lobes.

Because the FM pulse is generated by a digital to analog converter with a wide dynamic range and a transmitter with linear components, the energy, amplitude and phase characteristics of the acoustic pulse can be precisely controlled. This precision produces high repeatability and signal definition required for sediment classification.

The frequency range of operation is determined by the acoustic characteristics of the transmitter and receiver mounted on the vessel. Depending on the array size the system can transmit acoustic pulses with different center frequencies and bandwidths. The selection of the pulse is made by the operator while profiling to achieve the best imagery.

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KEY SPECIFICATIONS

ARRAY SIZE	4.5 KHZ CENTER FREQUENCY	OPERATIONAL DEPTH
2 x 2	40 degrees	300 meters
3 x 3	30 degrees	1500 meters
4 x 4	24 degrees	3000 meters
5 x 5	20 degrees	5000 meters
2-16 kHz Penetration (typical)	6 meters in coarse sand or 80 meters in clay	
Resolution	6 to 10 cm	

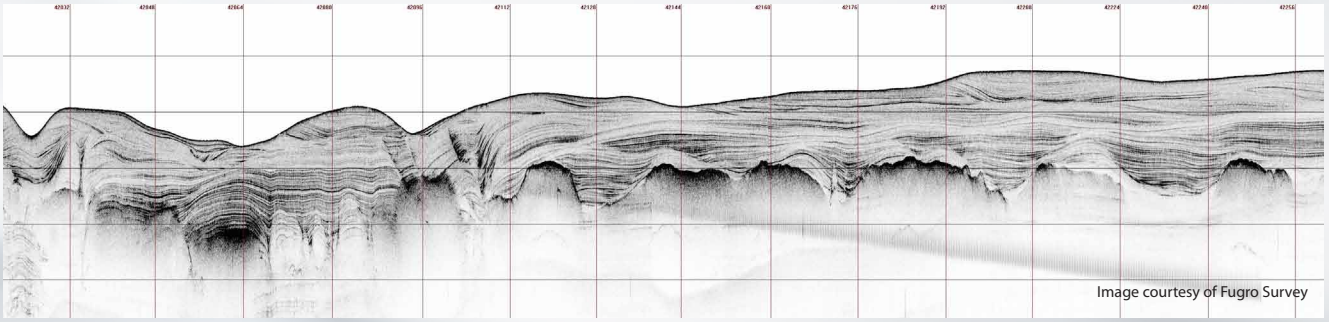

Image courtesy of Fugro Survey

For more information please visit EdgeTech.com

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