

# ECHO 81

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## EdgeTech

### 3400

SUB-BOTTOM PROFILER SYSTEM

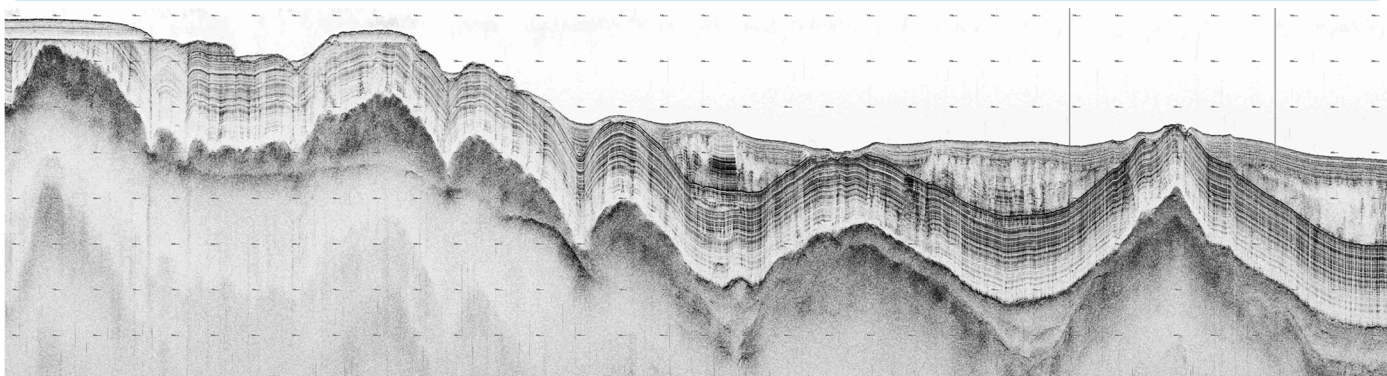
Building on the long running success of the EdgeTech sub-bottom profiler product line, the EdgeTech 3400 provides users many enhancements to current sub-bottom profiler systems. The 3400 is a wideband Frequency Modulated (FM) sub-bottom profiler utilizing EdgeTech's proprietary Full Spectrum CHIRP technology.



The system generates high resolution images of the sub-bottom stratigraphy in oceans, lakes, and rivers and provides excellent penetration in various bottom types. The EdgeTech 3400 comes in a dual 2-16 kHz transducer configuration. The towfish is configured with new PVDF receiver arrays segmented for standard sub-bottom profiling operations or a unique "pipeliner" mode for optimal location and imaging of buried pipelines.

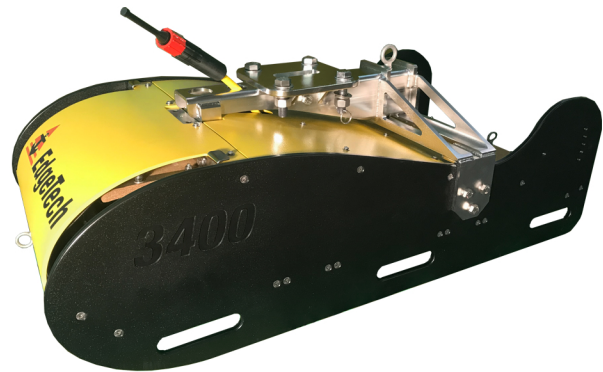
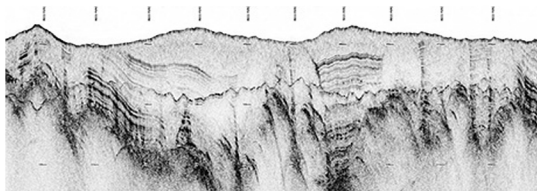
The system offers Real-Time Reflection Coefficient Measurements. This unique ability of the EdgeTech Sub-Bottom Profiler system allows users the ability to collect complex 'analytic' data using linear system architecture to measure sediment reflection and analyze sediment type determination. Additionally, the system has discrete transmit and receive channels allowing for continuous data collection resulting in a high ping rate particularly important for construction and pipeline surveys.

The topside configuration can support higher power configurations using an external amplifier. The newly designed towfish can either be towed behind a vessel or pole mounted over the side of the vessel. The EdgeTech 3400 Sub-bottom Profiling System comes as a complete package and includes a towfish, cable and a topside processor (configurable as a portable or rackmount topside) running EdgeTech's DISCOVER sub-bottom acquisition & processing software. The 3400 can also be interfaced to 3rd party software.



## KEY SPECIFICATIONS

| TOWFISH                      |  |
|------------------------------|--|
| Frequency Range              | 2 - 16 kHz   |
| Vertical Resolution          | 6 -10 cm (3 - 4 inches)                                  |
| Penetration (typical)        |  |
| In coarse calcareous sand    | 8 m (26 feet)  |
| In clay                      | 100 m (328 feet)   |
| Transmission Type            | Full Spectrum® FM Signal (CHIRP)                         |
| Length/Width/ Height         | 114 x 55 x 30 cm (45 x 21 x 12 inches)                   |
| Weight in Air                | 90 kg (198 lbs)  |
| Weight in Water              | 53 kg (116 lbs)  |
| Depth Rating                 | 100 m  |
| Tow Cable Length             | 50 m (maximum length)                                    |
| TOPSIDE INTERFACE            |  |
| Hardware                     | Rugged, portable splash proof enclosure (or Rackmounted) |
| Recommended Operating System | Windows® 10  |
| Display (Optional)           | Splash resistant semi-rugged laptop                      |
| File Format                  | Native JSF, SEG-Y & XTF                                  |
| Input/Output                 | Ethernet   |
| Power Input                  | 120/220 VAC Auto sensing                                 |
| POLE MOUNT CONFIGURATION     |  |
| Length/Width/Height          | 114 x 55 x 39 cm (45 x 21 x 15.35 inches)                |
| Weight in Air                | 84 kg (185 lbs) – pole mounted configuration             |
| Weight in Water              | 47 kg (103 lbs) – pole mounted configuration             |
| Deck Cable Length            | 20 m (50m max)   |
| TOW CABLE                    |  |
| Cable Diameter               | 14.9 mm (0.587 in)                                       |
| Min. Bending Radius          | 15 cm (6 inches)   |



### FEATURES

- Enhanced Sub-bottom PVDF receivers
- Sub-bottom mode or pipeliner mode
- Dual 2-16 kHz transducers
- Towed or Pole-mount options
- Digital receiver on towfish with Ethernet telemetry and power
- Reduced diameter tow cable
- Real-time pitch, roll, heave and depth sensors
- Surface echo attenuation
- Pulse library tailored for different survey applications
- Data display in multi-frequency bands

### APPLICATION

- Geological surveys
- Environmental site investigations
- Sediment classification
- Buried pipeline & cable surveys
- Archeological surveys
- Mining/dredging surveys
- Map, measure & classify sediment layers within the sea floor



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