

IMAGENEX MODEL 837 "Delta T" MULTIBEAM PROFILING SONAR

APPLICATIONS:

- ROV, AUV, & UUV
- Offshore Oil & Gas
- Sunken Timber Recovery
- Diving Support
- Surveying
- Search & Recovery
- Inspection
- Underwater Archaeology
- Scientific Research

FEATURES:

- Programmable
- High speed
- High performance
- Lower cost
- Low power
- Simple set-up and installation
- Ethernet
- 5 m to 300 m range
- Integrated Video Capture and Display
- Built in GPS Track Plotter

The Imagenex Model 837 "Delta T" is a multiple receiver sonar system designed to provide video-like imaging with all the advantages of underwater sonar. Innovative digital signal processing is used to optimize data usage from all channels to achieve the best possible resolution at every point in the field of view. Recent advances in computing power have made it possible to transfer and process this data at resolutions equal to computer monitor resolution, and with image frame rates of better than 20 frames per second!

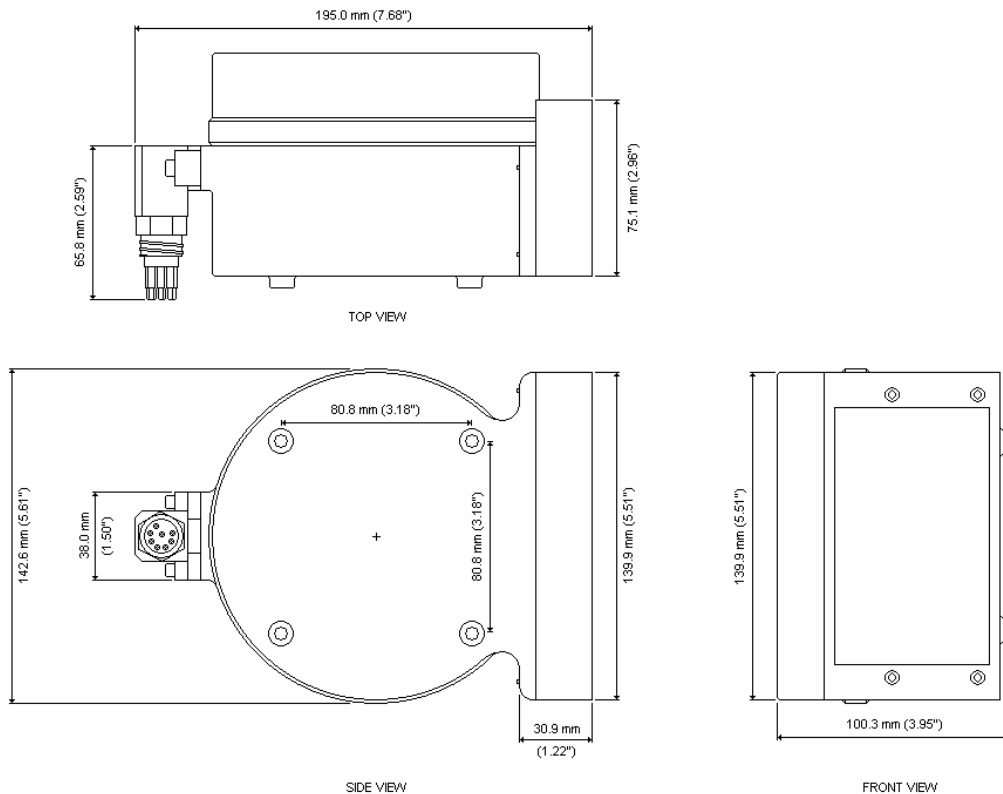
The Delta T system has been designed from the ground up with the most advanced, high accuracy, low power electronic components available to provide breakthroughs in system power consumption, package size, and price. This advanced electronics package has built in flexibility and programmability to accommodate a wide range of transducer arrays. Thus, the Delta T is the first in a family of new technology products which will have imaging and profiling capabilities to suit your underwater application. Imagenex sonars: advancing underwater imaging capability for the everyday user.



Patent Pending

| HARDWARE SPECIFICATIONS: | |
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| FREQUENCY | 260 kHz |
| TRANSDUCER BEAM WIDTH (nominal) | Receive: 120° x 3° Transmit: 120° x 3° |
| EFFECTIVE BEAM WIDTH | 0.75° (with 600 beams) |
| BEAMS* | 75, 150, 300, 600 |
| RANGE RESOLUTION | 0.2% of range |
| MIN. DETECTABLE RANGE | 0.5 m |
| MAX. OPERATING DEPTH | 300 m |
| FRAME RATE | Up to 20 fps |
| INTERFACE TO PC | 10 Mbps Ethernet (10 BASE-T) using TCP/IP |
| MAX. CABLE LENGTH | 100 m on regular twisted pair |
| CONNECTOR | Side mounted right angle, 8 conductor, wet mateable (MCBH-8MP-SS) |
| POWER SUPPLY | 22 – 50 VDC |
| DIMENSIONS | See drawing |
| WEIGHT: In Air | 2.49 kg (5.5 lbs) |
| In Water | 0.7 kg (1.5 lbs) |
| MATERIALS | 6061-T6 Aluminum, Epoxy, PVC, Stainless Steel connector |
| FINISH | Hard Anodize |

*Data is acquired at full resolution every shot: processing the data for screen display on a PC can slow the system at highest number of beams. 75 beam mode is recommended for real time data acquisition. The data can then be played back at highest resolution (600 beam).



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| SOFTWARE SPECIFICATIONS: | DeltaT.exe |
| WINDOWS™ OPERATING SYSTEM | Windows™ XP |
| DISPLAY MODES | Sector, Linear, Perspective, Profile, Beam Test |
| PERSISTENCE (TRAIL) | 1 – 300 seconds |
| RANGE SCALES | 5 m, 10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 150 m, 200 m, 250 m, 300 m |
| SECTOR SIZES | 30°, 60°, 90°, 120° |
| FILE FORMAT: RAW DATA PROFILE POINT | (filename).837 (filename).83P |
| RECOMMENDED MINIMUM COMPUTER REQUIREMENTS: | 2 GHz Pentium 4 256 MB RAM 20 GB Hard Disk 1024 x 768 screen resolution |

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| ORDERING INFORMATION: | | |
| 300 m UNIT | Standard | 837-000-200 |

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