IMAGENEX MODEL 837B "Delta T" 1000 m 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 100 m range scales
- Integrated Video Capture and Display
- Built in GPS Track Plotter

The Imagenex Model 837B "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!

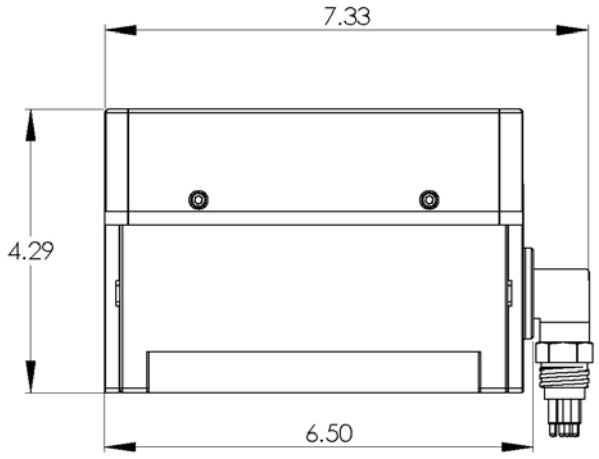
The Delta T system has been designed from the ground up with the most advanced, high accuracy, low power electronic components available to provide breakthroughs in system power consumption, package size, and price. This advanced electronics package has built in flexibility and programmability to accommodate 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.

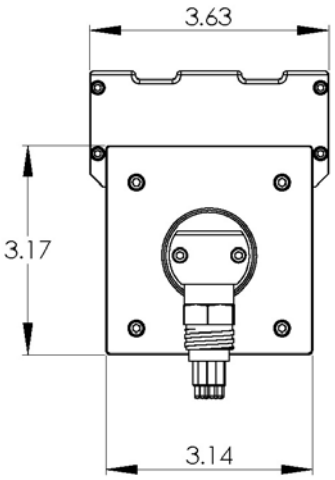
Patent Pending

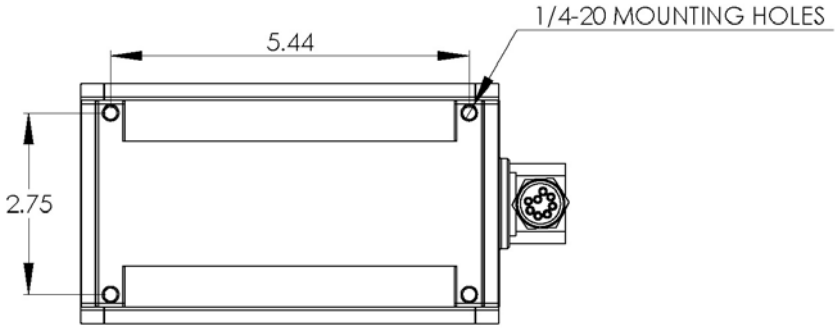
HARDWARE SPECIFICATIONS:	
FREQUENCY	260 kHz
TRANSDUCER BEAM WIDTH (nominal)	Receive: 120° x 3° Transmit: 120° x 3°
EFFECTIVE BEAM WIDTH	3°, 1.5°, 0.75°
BEAMS*	120, 240, 480
RANGE RESOLUTION	0.2% of range
MIN. DETECTABLE RANGE	0.5 m
MAX. OPERATING DEPTH	1000 m
FRAME RATE	Up to 20 fps
INTERFACE TO PC	Standard: 10 Mbps Ethernet (10 BASE-T) using TCP/IP Bit rate may vary if an Ethernet extender is in use.
MAX. CABLE LENGTH	Standard: 100 m on CAT5e Cable length may be increased up to ~9000 m using an Ethernet extender. Please enquire for more information.
CONNECTOR	End mounted, 8 conductor, wet mateable (Subconn MCBH-8M-SS) Optional right angle connector
POWER SUPPLY	22 – 32 VDC at less than 5 Watts
DIMENSIONS	See drawing
WEIGHT: In Air **In Water**	Aluminum unit: ~2.4 kg (5.5 lbs) Stainless Steel unit: ~5.2 kg (11.5 lbs) Aluminum unit: ~1.1 kg (2.5 lbs) Stainless Steel unit: ~3.8 kg (8.5 lbs)
MATERIALS	Aluminum unit: 6061-T6 Aluminum, Epoxy, PVC, Stainless Steel connector Stainless Steel unit: 316 Stainless Steel, Epoxy, PVC, Stainless Steel connector
FINISH	Hard Anodize (Aluminum unit only)

*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. 120 beam mode is recommended for real time data acquisition. The data can then be played back at highest resolution (480 beam).

SOFTWARE SPECIFICATIONS:	DeltaT.exe
WINDOWS™ OPERATING SYSTEM	Windows™ XP, Vista
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
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







ORDERING INFORMATION:		
1000 m UNIT in Aluminum	Standard	837B-000-431
1000 m UNIT in Stainless Steel	Standard	837B-000-432
Right Angle Connector	Option	-010
IP Address*	Option	-020
675 kHz	Option	-022
External Trigger	Option	-023
Dual Head Software	Option	-024
Pitch, Roll, & Heading Sensor	Option	-029

*Note: Standard IP Address is 192.168.0.2
A different IP Address may be specified upon ordering.