

IMAGENEX MODEL 837B “Delta T” 6000 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.

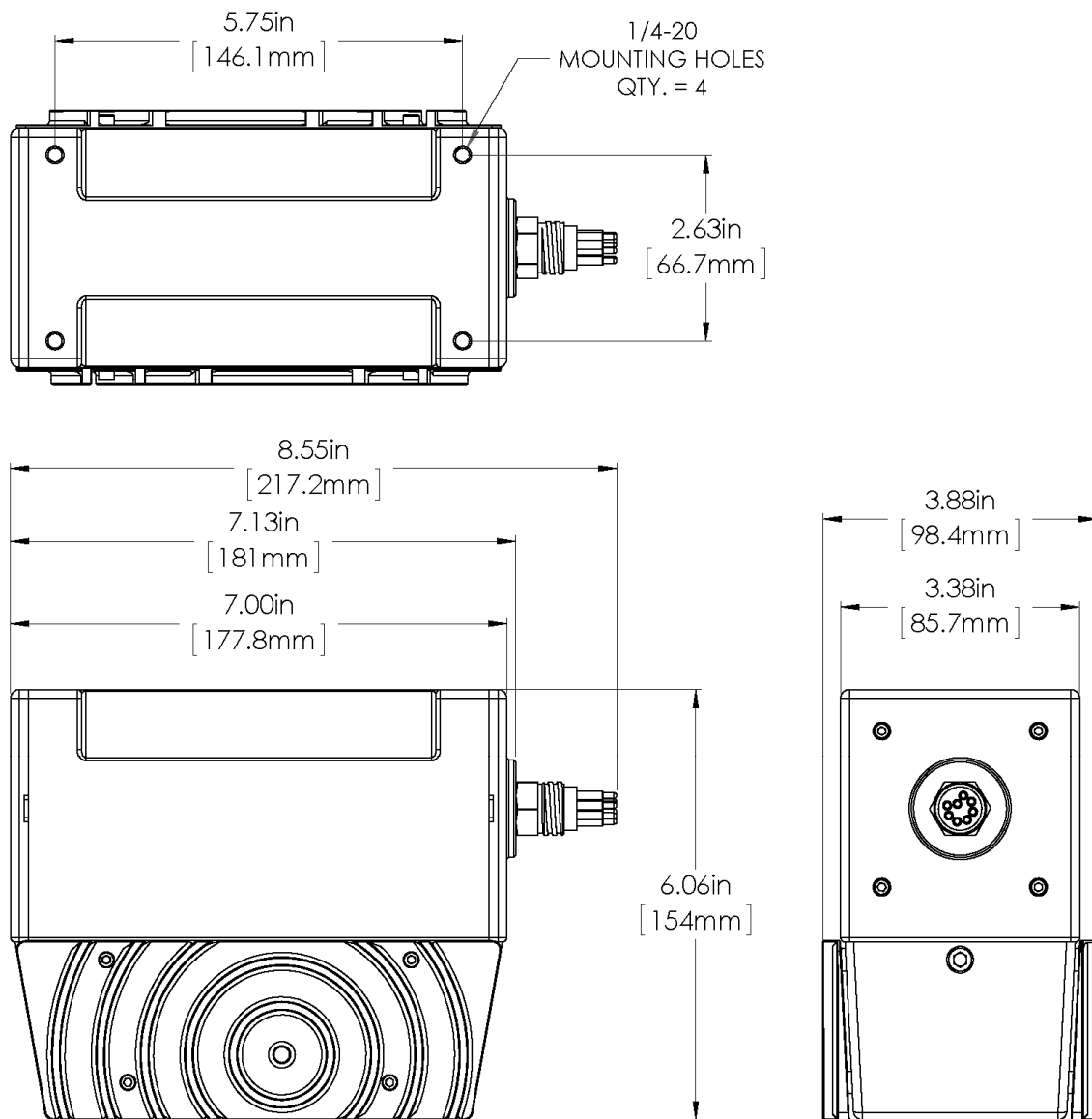


Patent Pending

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: SCREEN OUTPUT	0.2% of range 0.02% of range
MIN. DETECTABLE RANGE	0.5 m
MAX. OPERATING DEPTH	6000 m
FRAME RATE	Up to 20 fps
INTERFACE TO PC	10/100 Mbps Ethernet 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 MCBH8M-Ti)
POWER SUPPLY	22 – 32 VDC at less than 5 Watts
DIMENSIONS	See drawing
WEIGHT: In Air	~5 kg (~11 lbs)
In Water	~2.9 kg (~6.3 lbs)
MATERIALS	6AL4V Titanium, Epoxy, PVC, Titanium connector

* 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, 7, 8, 10
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°
IP ADDRESS	User programmable (Default is 192.168.0.2)
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:

6000 m UNIT in Titanium	Standard	837B-000-437
External Trigger	Option	-023
Dual Head Software	Option	-024

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