

IMAGENEX MODEL 837A "Delta T" 3000 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
- Integrated Video Capture and Display
- Built in GPS Track Plotter

The Imagenex Model 837A "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



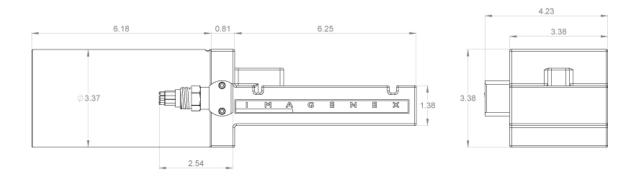
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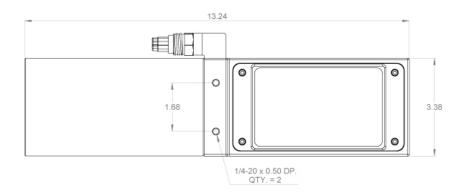
HARDWARE		
SPECIFICATIONS:		
FREQUENCY	260 kHz	
TRANSDUCER BEAM WIDTH	Receive: 120° x 3°	
(nominal)		
EFFECTIVE BEAM WIDTH	Transmit: 120° x 3°	
	3°, 1.5°, 0.75°	
BEAMS*	120, 240, 480	
RANGE RESOLUTION	0.2% of range	
MIN. DETECTABLE RANGE	0.5 m	
MAX. OPERATING DEPTH	3000 m	
FRAME RATE	Up to 20 fps	
INTERFACE 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	Side mounted right angle, 8 conductor,	
	wet mateable (Subconn MCBH-8M-SS)	
POWER SUPPLY	22 – 32 VDC at less than 5 Watts	
DIMENSIONS	See drawing	
WEIGHT: In Air	Aluminum: 3 kg (7 lbs)	
	Stainless Steel: 6 kg (14 lbs)	
In Water	Aluminum: 1.2 kg (3 lbs)	
	Stainless Steel: 4.5 kg (10 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	

*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	DeltaT.exe	
SPECIFICATIONS:		
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	(filename).837	
PROFILE POINT	(filename).83P	
RECOMMENDED	2 GHz Pentium 4	
MINIMUM COMPUTER	256 MB RAM	
REQUIREMENTS:	20 GB Hard Disk	
	1024 x 768 screen resolution	







ORDERING INFORMATION:			
3000 m UNIT in Aluminum	Standard	837A-000-420	
3000 m UNIT in Stainless Steel	Standard	837A-000-421	
Straight Connector	Option	-009	
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.

Product and company names listed are trademarks or trade names of their respective companies.

