IMAGENEX MODEL 965
MULTIBEAM IMAGING SONAR

APPLICATIONS:

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

FEATURES:

- Built-in tilt drive electronics
- Enhanced vertical scan capabilities
- High speed
- Ethernet (10/100 Mbps)
- Programmable
- Simple set-up and installation
- 1.25 m to 200 m range scales
- Integrated Video Capture and Display
- User programmable IP address

The Imagenex Model 965 is an advanced, high-speed, high-resolution, multibeam imaging sonar system that has been designed to provide simple, reliable, and accurate representation of underwater images.

The system consists of an underwater sonar head and an optional tilt motor assembly (recommended) connected by Ethernet to a Windows™ based computer.

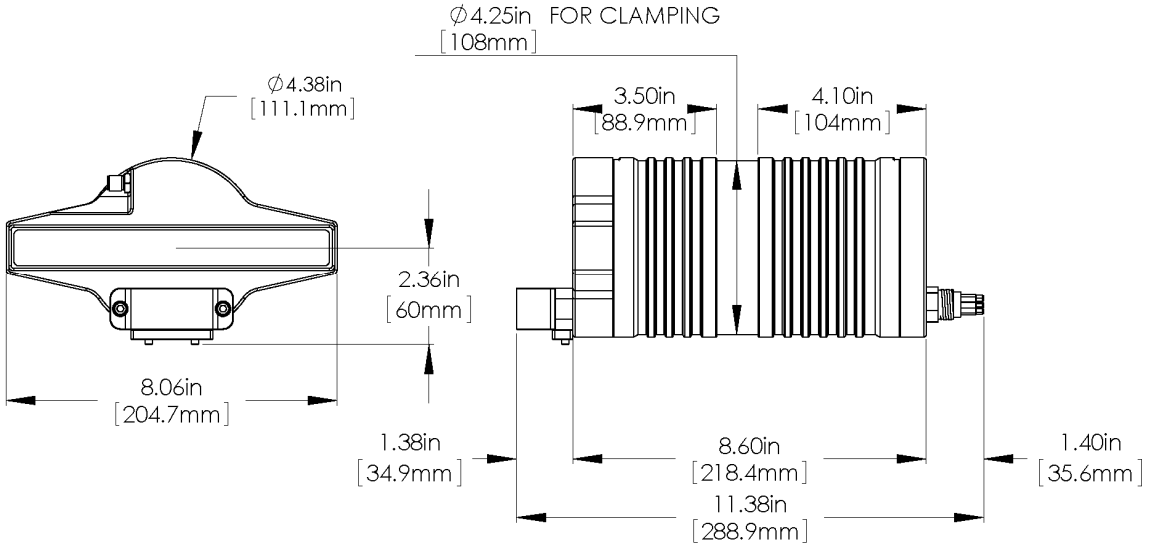
The Model 965 includes circuitry which permits the attachment of an optional tilt motor assembly. As a recommended option, this drive, which allows for real time vertical angular adjustment of the sonar, enables the operator to adjust the vertical scan angle from +10° to -90° in 5° increments. This permits the operator to tilt the sonar down towards the target as it approaches.

HARDWARE SPECIFICATIONS:	
FREQUENCY	260 kHz or Optional 675 kHz
TRANSDUCER BEAM WIDTH (nominal)	Receive: 120° (horizontal) x 20° (vertical) Transmit: 120° (horizontal) x 20° (vertical)
EFFECTIVE HORIZONTAL BEAM WIDTH	1.5°
BEAMS*	120, 240, 480
RANGE RESOLUTION	0.2% of range
MIN. DETECTABLE RANGE	0.5 m
MAX. OPERATING DEPTH	300 m
FRAME RATE	Up to 10 fps
INTERFACE TO PC	Standard: 10/100 Mbps Ethernet (10 BASE-T or 100 BASE-TX) 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 MCBH8M-AS)
POWER SUPPLY	22 – 32 VDC at less than 20 Watts Optional 36 – 60 VDC
DIMENSIONS	See drawing
WEIGHT: In Air 260 kHz	With Tilt: 10.5 lbs (4.8 kg) Without Tilt: 4.5 lbs (~2 kg)
675 kHz	TBA
In Water 260 kHz	With Tilt: 3.7 lbs (1.7 kg) Without Tilt: ~0.2 lbs (0.07 kg)
675 kHz	TBA
MATERIALS	6061-T6 Aluminum, Epoxy, PVC, Aluminum connector
FINISH	Hard Anodize

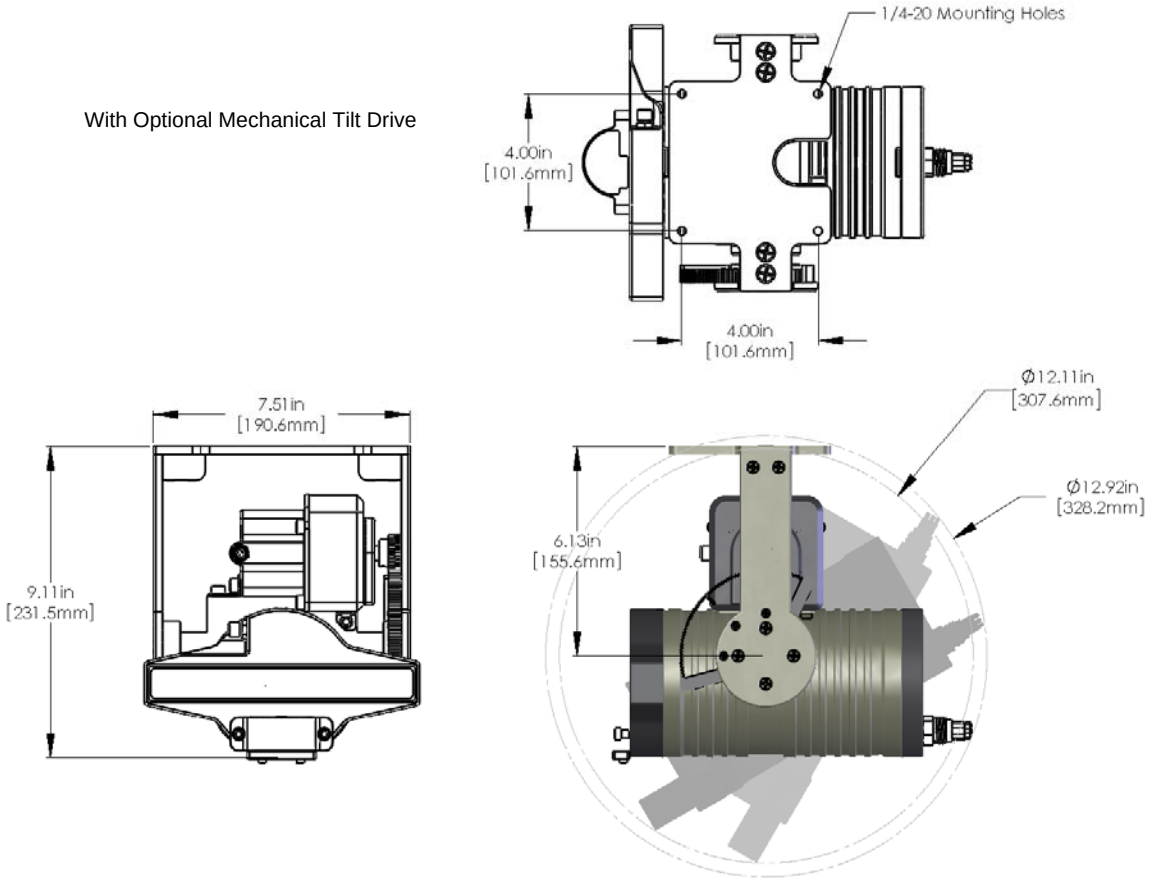
*Data is acquired at full resolution every shot: processing the data for screen display on a PC can slow the system at highest number of beams. 120 beam mode is recommended for real time data acquisition. The data can then be played back at highest resolution (480 beam).
**Only for 10 BASE-T

MECHANICAL TILT DRIVE SPECIFICATIONS:	(Optional)
SCAN ANGLE	+10° to -90° in 5° increments
STEPPER MOTOR DRIVE	Self-calibrating
POWER	Less than 10 Watts (supplied from sonar head electronics)
CONNECTOR	IE55 series
WEIGHT: In Air	TBA
In Water	TBA
MATERIALS	6061-T6 Aluminum, PVC, Delrin, Stainless Steel
FINISH	Hard Anodize

SOFTWARE SPECIFICATIONS:	Win965.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 260 kHz	1.25 m, 2.5 m, 5 m, 10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 150 m, 200 m
675 kHz	1.25 m, 2.5 m, 5 m, 10 m, 20 m, 30 m, 40 m, 50 m, 60 m
SECTOR SIZES	30°, 60°, 90°, 120°
FILE FORMAT	(filename).965
RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:	2 GHz Pentium 4 256 MB RAM 20 GB Hard Disk 1024 x 768 screen resolution



With Optional Mechanical Tilt Drive



ORDERING INFORMATION:		
300 m UNIT	Standard	965-000-100
Right Angle Connector	Option	-010
IP Address*	Option	-020
675 kHz	Option	-022
Mechanical Tilt Drive	Option	-042

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