



# IMAGENEX MODEL 881L-GS GYRO STABILIZED MULTI-FREQUENCY IMAGING SONAR

## APPLICATIONS:

- ROV, AUV, & UUV
- Manned Submersibles
- Search & Recovery
- Borehole/cave work
- Drop sonar
- Scientific Research

## FEATURES:

- **Ethernet**
- Programmable (format available)
- Gyro stabilized transducer steering
- Simple set-up and installation
- Full scale range from 1 m to 200 m
- Orientation module

Gyro-stabilization of the Imagenex Model 881L-GS makes the high resolution 881L sonar into a system capable of crystal clear visualization of the ocean environment from moving platforms, no longer compromised by the blurring effects of host vehicle rotation. An advanced, low drift gyro is integrated directly into the sonar head, so the sonar can now compensate for vehicle motion in real time with unprecedented accuracy, stability, and robustness.

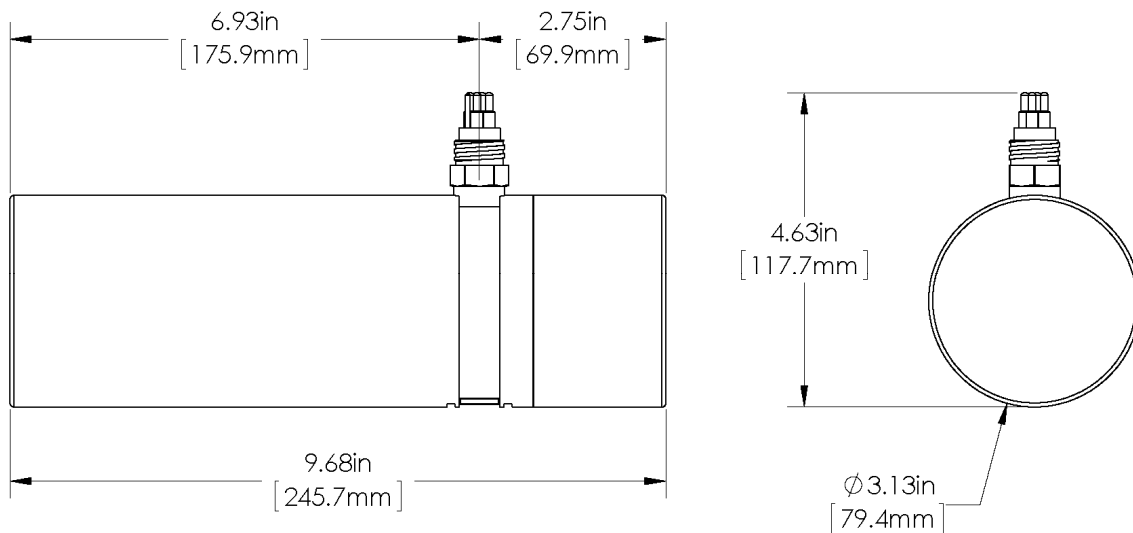
The enhanced capabilities of the 881L-GS have not compromised the performance of the 881L sonar. Using Ethernet communications, this all-in-one, high performance digital imaging sonar can still exceed 100 shots per second on short range at up to 2 mm range resolution, and can auto-adjust acoustic frequency and resolution to scan up to a 200 m radius, 360° surrounding area.

The Model 881L-GS still has low power, simple set-up, and small size that make it an ideal tool for large work ROV's and small inspection vehicles. On it's own it is now an amazingly simple drop sonar and borehole inspection package: just add a laptop computer and power supply and run the included Imagenex software.



<b>HARDWARE SPECIFICATIONS:</b>	
<b>FREQUENCY</b>	310 kHz, 675 kHz, or 1 MHz (standard default settings) -Other frequencies can be selected through programmable software configurations (Tunable from 280 kHz to 1.1 MHz in 5 kHz steps)
<b>TRANSDUCER</b>	Imaging type, fluid compensated
<b>TRANSDUCER BEAM WIDTH</b>	310 kHz: 4° x 40° 675 kHz: 1.8° x 20° 1 MHz: 0.9° x 10°
<b>RANGE RESOLUTION</b>	1 m – 4 m: 2 mm (0.08") 5 m & up: 10 mm (0.4")
<b>ORIENTATION MODULE (accuracies):</b>	
<b>PITCH &amp; ROLL</b>	± 0.1° typical
<b>HEADING (Magnetic)</b>	± 1.0° typical
<b>MIN. DETECTABLE RANGE</b>	150 mm (6")
<b>MAX. OPERATING DEPTH</b>	1000 m and 3000 m available
<b>MAX. CABLE LENGTH</b>	Standard: 100 m on CAT5e Cable length may be increased up to ~9000 m using an Ethernet extender. Please enquire for more information.
<b>INTERFACE</b>	Standard: 10 Mbps Ethernet (10 BASE-T) using TCP/IP Bit rate may vary if an Ethernet extender is in use.
<b>CONNECTOR</b>	Side mounted, eight conductor, wet mateable (Subconn MCBH8M-AS) Optional right angle or end mount connector
<b>POWER SUPPLY</b>	20 – 32 VDC at less than 7 Watts
<b>DIMENSIONS (for both depths)</b>	79.5 mm (3.13") diameter x 245.7 mm (9.68") length
<b>WEIGHT: In Air</b>	1000 m unit: 1.8 kg (4 lbs) 3000 m unit: TBA
<b>In Water</b>	1000 m unit: TBA 3000 m unit: TBA
<b>MATERIALS</b>	1000 m unit: 6061-T6 Aluminum & Polyurethane 3000 m unit: Titanium, Polyurethane & 300 series stainless steel
<b>FINISH</b>	Hard Anodize

<b>SOFTWARE SPECIFICATIONS:</b>	<b>Win881AL.exe</b>
<b>WINDOWS™ OPERATING SYSTEM</b>	Windows™ XP, Vista, 7, 8, 10
<b>MODES</b>	Sector, Polar and Side Scan
<b>GYRO MODES</b>	North Up, Heading Up, Target Steering
<b>RANGE SCALES</b>	1 m, 2 m, 3 m, 4 m, 5 m, 10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 150 m, 200 m
<b>TRAIN ANGLES</b>	Continuous rotation, 3° increments
<b>SECTOR SIZE:</b>	
<b>SECTOR MODE</b>	0° – 180°, 3° increments
<b>POLAR MODE</b>	0° – 357°, 3° increments, or Continuous rotation
<b>STEP SIZES</b>	Slow (0.3°), Medium (0.6°), Fast (0.9°), Faster (1.2°), Fastest (2.4°)
<b>GRID TYPES</b>	Polar and rectangular
<b>FILE FORMAT</b>	(filename).81R
<b>RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:</b>	2 GHz Pentium 4 256 MB RAM 20 GB Hard Disk 1024 x 768 Screen Resolution



<b>ORDERING INFORMATION:</b>		
<b>1000 m UNIT</b>	Standard	881-000-500
<b>3000 m UNIT</b>	Standard	881-000-501
End mount connector	Option	-009
Right angle connector	Option	-010
IP Address*	Option	-020
Gyro Stabilization	Option	-048

\*Note: Standard IP Address is 192.168.0.5  
A different IP Address may be specified upon ordering.

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