IMAGENEX MODEL 881A-GS
10000 m GYRO STABILIZED
MULTI-FREQUENCY IMAGING SONAR

APPLICATIONS:

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

FEATURES:

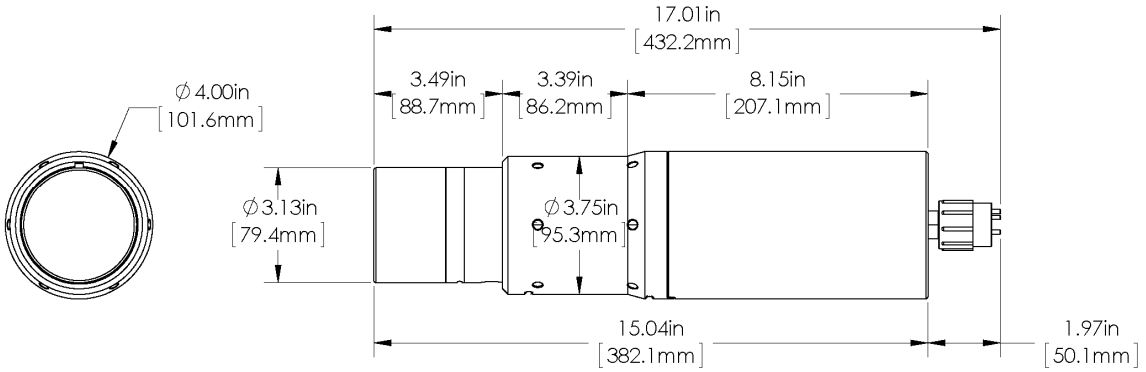
- Serial Communications
- Programmable (format available)
- Gyro stabilized transducer steering
- Simple set-up and installation
- Full scale range from 1 m to 200 m
- Orientation module
- CHIRP Technology

Gyro-stabilization of the Imagenex Model 881A-GS makes the high resolution 881A 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 881A-GS have not compromised the performance of the 881A sonar. On short range, this sonar scans using a 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 881A-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.

HARDWARE SPECIFICATIONS:	
FREQUENCY	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)
TRANSDUCER	Imaging type, fluid compensated
TRANSDUCER BEAM WIDTH	310 kHz: 4° x 40° 675 kHz: 1.8° x 20° 1 MHz: 0.9° x 10°
RANGE RESOLUTION	1 m – 4 m: 2 mm (0.08”) 5 m & up: 10 mm (0.4”)
ORIENTATION MODULE (accuracies):	
PITCH & ROLL	± 0.1° typical
HEADING (Magnetic)	± 1.0° typical
MIN. DETECTABLE RANGE	150 mm (6”)
MAX. OPERATING DEPTH	10000 m
MAX. CABLE LENGTH	1000 m on typical twisted shielded pair (RS-485)
INTERFACE	RS-485 serial interface @ 115.2 kbps (or optional RS-232)
CONNECTOR	End mounted, four conductor, wet mateable (Subconn BH4M-Ti)
POWER SUPPLY	20 – 36 VDC at less than 7 Watts
DIMENSIONS (for both depths)	101.6 mm (4”) diameter x 382.1 mm (15.04”) length
WEIGHT: In Air **In Water**	~ 8 kg (~ 17 lbs) ~ 5.5 kg (~ 12 lbs)
MATERIALS	Titanium & Polyurethane
FINISH	None



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

ORDERING INFORMATION:		
10000 m UNIT	Standard	881-000-403
RS-232	Option	-006
Gyro Stabilization	Option	-048