

IMAGENEX MODEL 878 "RGB" SIDESCAN SONAR

APPLICATIONS:

- Underwater Archaeology
- Sunken Timber Recovery
- Search & Recovery
- Surveying
- Law Enforcement Work
- Scientific Research
- Environmental Survey

FEATURES:

- Triple frequency
- High resolution 1000 data points per side
- 300 m depth rating
- Up to 1000 m (3000') total coverage
- 23 m (75') tow cable included
- LAN compatible
- Built-in track plotter
- Built-in internal GPS receiver
- Built-in orientation module

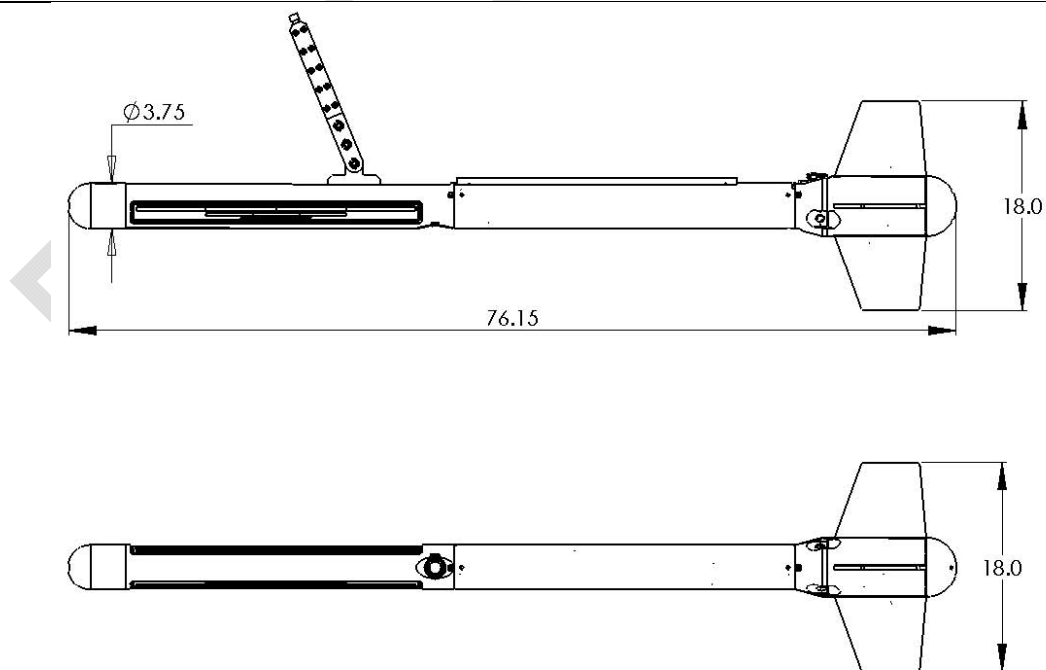
The Imagenex Model 878 "RGB" Sidescan Sonar is the next generation in high resolution sidescan sonar. The unit runs three simultaneous sonars on each side at different sound wavelengths, providing enhanced image clarity and now, for the first time, the ability to discriminate targets based on their acoustic "colour". Just as your eyes see in colour, the RGB sonar uses different wavelengths of sound, translating them directly to colours on the display of a Windows™ based laptop or desktop PC. To further enhance these unique sonar capabilities, the towfish is equipped with an echo sounder and a built-in orientation module as well as depth and temperature sensors.

The Model 878 system comes as a completely integrated package including towfish, cable, GPS enabled surface interface box, and Microsoft Windows™ based real time operation and data playback software, thus providing a complete, easy to use, but highly advanced acoustic bottom visualization system.



Patent Pending

UNDERWATER HARDWARE SPECIFICATIONS:	
SIDECAN:	
FREQUENCY	120 kHz / 260 kHz / 540 kHz
TRANSDUCER	Three transducers per side, tilted down 20°
TRANSDUCER BEAM WIDTH	1° x 60°
RANGE RESOLUTION	Range scale ÷ 1000
ECHO SOUNDER:	
FREQUENCY	200 kHz
TRANSDUCER	Conical
TRANSDUCER BEAM WIDTH	10°
RANGE RESOLUTION	Range scale ÷ 1000
ORIENTATION MODULE (accuracies):	
PITCH & ROLL	± 0.1° typical
HEADING	± 1.0° typical
DEPTH	± 0.5% of FS typical
TEMPERATURE	± 0.5°C typical
MAX. OPERATING DEPTH	300 m (~1000')
MAX. CABLE LENGTH	1000 m using built-in Ethernet extender
INTERFACE	Up to 2.3 Mbps Ethernet (10 BASE-T) using TCP/IP
CONNECTOR	Wet mateable (Impulse MCBH-4-MP)
POWER SUPPLY	40 – 55 VDC at less than 15 Watts, supplied from Surface Interface Box
DIMENSIONS	See drawing
WEIGHT: In Air	~75 lbs
In Water	~40 lbs
MATERIALS	6061-T6 Aluminum, PVC, 300 Series Stainless Steel, Polyurethane & Zinc
FINISH	Hard anodized



SOFTWARE SPECIFICATIONS:	RGB SideScan.exe
WINDOWS™ OPERATING SYSTEM	Windows™ XP, Vista
ZOOM MODES	1x, 2x, 3x, 4x, and 5x dynamically moveable
RANGE SCALES	
SIDESCAN:	
RGB MODE:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 125 m
120 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 125 m, 150 m, 200 m, 250 m, 300 m, 400 m, and 500 m
260 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 125 m, 150 m, 200 m, and 250 m
540 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 125 m
ECHO SOUNDER:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 125 m, 150 m, 200 m
FILE FORMAT	(filename).RGB
GPS INPUT (4800, N, 8, 1) NMEA 0183 FORMATS:	GLL and VTG; GGA and VTG; RMC
RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:	800 MHz Pentium 3 256 MB RAM 2 GB Hard Disk 1024 x 768 x 256 colour graphics

ORDERING INFORMATION:		
300 m unit w / 23 m tow cable	Standard	878-000-150
Surface Interface Box	Standard	878-000-001
60 m (200') Sidescan tow cable	Option	-021
100 m (330') Sidescan tow cable	Option	-033

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