

IMAGENEX MODEL 878 "RGB" SIDESCAN SONAR

APPLICATIONS:

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

FEATURES:

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

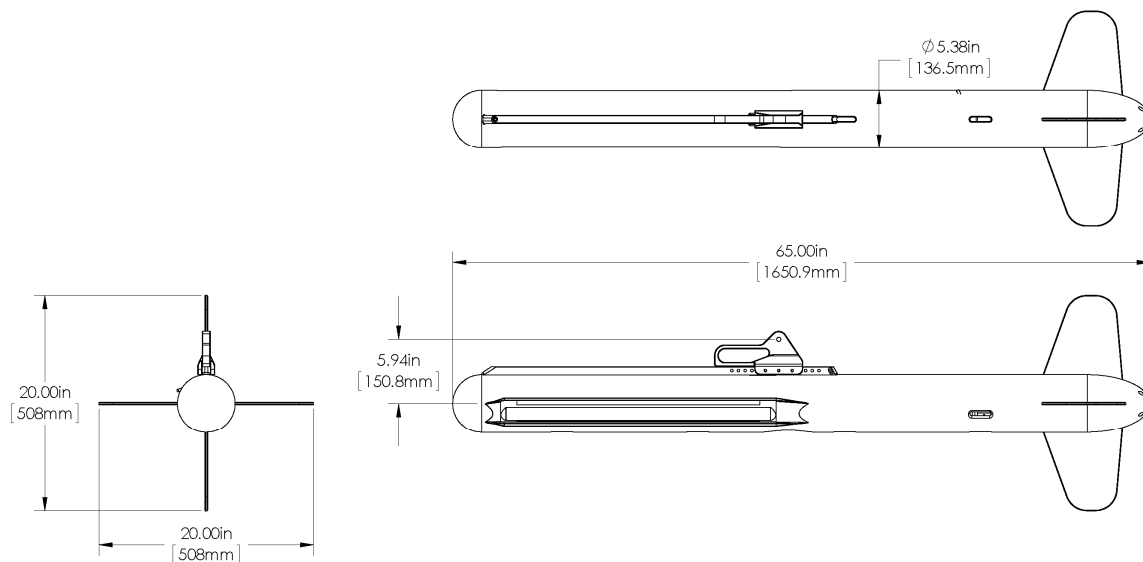
The Imagenex Model 878 "RGB" Sidescan Sonar is the next generation in high resolution sidescan sonar. The unit runs three simultaneous sonars on each side at different sound wavelengths, providing enhanced image clarity and now, for the first time, the ability to discriminate targets based on their acoustic "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:	
FREQUENCIES	120 kHz / 260 kHz / 540 kHz
TRANSDUCERS	Three transducers per side, with adjustable depression angle from -10° to -30° in 5° steps
TRANSDUCER BEAM WIDTH	1° x 60°
RANGE RESOLUTION	Range scale ÷ 1000
ECHO SOUNDER: (optional)	
FREQUENCY	200 kHz
TRANSDUCER	Conical
TRANSDUCER BEAM WIDTH	10°
RANGE RESOLUTION	Range scale ÷ 1000
ORIENTATION MODULE (accuracies): (optional)	
PITCH & ROLL	± 0.1° typical
HEADING	± 1.0° typical
DEPTH	± 0.5% of FS typical
TEMPERATURE	± 0.5°C typical
MAX. OPERATING DEPTH	1000 m (~3280')
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 (Subconn MCIL4M)
POWER SUPPLY	130 VDC at less than 15 Watts, supplied from Surface Interface Box
DIMENSIONS	See drawing
WEIGHT:	
In Air	~33 kg (~73 lbs)
In Water	~15 kg (~32 lbs)
MATERIALS	6061-T6 Aluminum, PVC, 300 Series Stainless Steel, Polyurethane, Polycarbonate & Epoxy
FINISH	Hard anodized (internals) & polyester powder



SOFTWARE SPECIFICATIONS:	SS878_RGB.exe
WINDOWS™ OPERATING SYSTEM	Windows™ XP, Vista, 7, 8, 10
ZOOM MODES	1x, 2x, and 4x dynamically moveable
RANGE SCALES	
SIDESCAN:	
RGB MODE:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 120 m
120 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 120 m, 150 m, 200 m, 250 m, 300 m, 400 m, 500 m
260 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 120 m, 150 m, 200 m, 250 m, 300 m
540 kHz:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 120 m
ECHO SOUNDER:	10 m, 20 m, 30 m, 40 m, 50 m, 60 m, 80 m, 100 m, 120 m, 150 m, 200 m, 250 m, 300 m
FILE FORMAT	(filename).878
GPS INPUT (4800, N, 8, 1) NMEA 0183 FORMATS:	GLL and VTG; GGA and VTG; RMC
RECOMMENDED MINIMUM COMPUTER REQUIREMENTS:	Intel Core i3 @ 2.00 GHz 4 GB RAM 100 GB Hard Disk 1920 x 1080, True colour graphics

ORDERING INFORMATION:		
1000 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
Echo Sounder	Option	-046
Orientation Module	Option	-047

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