

## **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

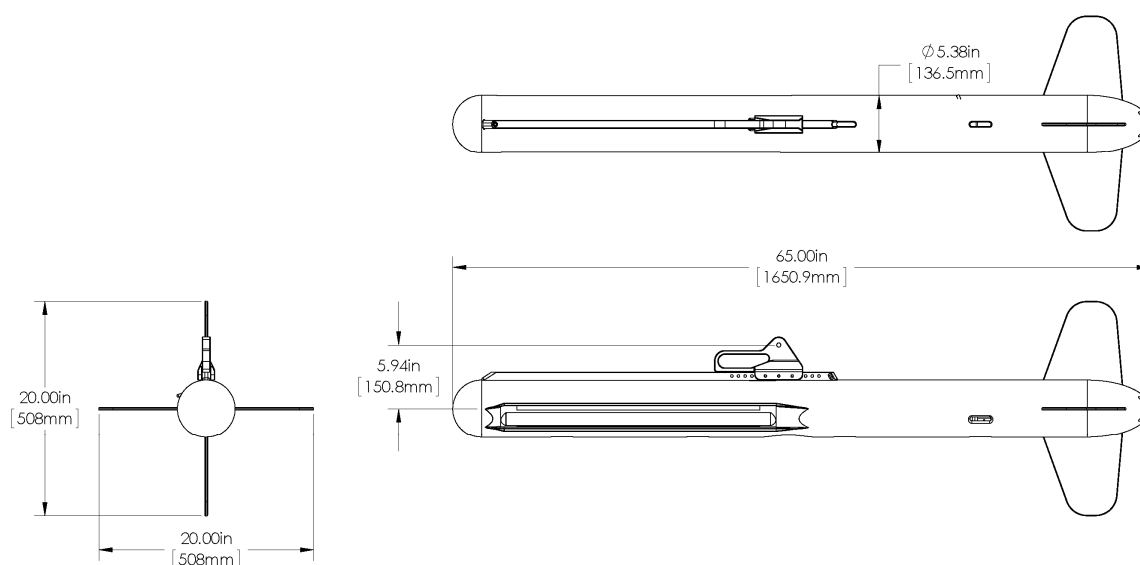
The Imagenex Model 878 "RGB" Sidescan Sonar is the next generation in high resolution sidescan sonar. The unit runs three simultaneous sonars on each side at different sound wavelengths, providing enhanced image clarity and now, for the first time, the ability to discriminate targets based on their acoustic "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

<b>UNDERWATER HARDWARE SPECIFICATIONS:</b>	
<b>SIDESCAN:</b>	
<b>FREQUENCIES</b>	120 kHz / 260 kHz / 540 kHz
<b>TRANSDUCERS</b>	Three transducers per side, with adjustable depression angle from -10° to -30° in 5° steps
<b>TRANSDUCER BEAM WIDTH</b>	1° x 60°
<b>RANGE RESOLUTION</b>	Range scale ÷ 1000
<b>ECHO SOUNDER: (optional)</b>	
<b>FREQUENCY</b>	200 kHz
<b>TRANSDUCER</b>	Conical
<b>TRANSDUCER BEAM WIDTH</b>	10°
<b>RANGE RESOLUTION</b>	Range scale ÷ 1000
<b>ORIENTATION MODULE (accuracies): (optional)</b>	
<b>PITCH &amp; ROLL</b>	± 0.1° typical
<b>HEADING</b>	± 1.0° typical
<b>DEPTH</b>	± 0.5% of FS typical
<b>TEMPERATURE</b>	± 0.5°C typical
<b>MAX. OPERATING DEPTH</b>	1000 m (~3280')
<b>MAX. CABLE LENGTH</b>	1000 m using built-in Ethernet extender
<b>INTERFACE</b>	Up to 2.3 Mbps Ethernet (10 BASE-T) using TCP/IP
<b>CONNECTOR</b>	Wet mateable (Subconn MCIL4M)
<b>POWER SUPPLY</b>	130 VDC at less than 15 Watts, supplied from Surface Interface Box
<b>DIMENSIONS</b>	See drawing
<b>WEIGHT:</b>	
<b>In Air</b>	~33 kg (~73 lbs)
<b>In Water</b>	~15 kg (~32 lbs)
<b>MATERIALS</b>	6061-T6 Aluminum, PVC, 300 Series Stainless Steel, Polyurethane, Polycarbonate & Epoxy
<b>FINISH</b>	Hard anodized (internals) & polyester powder



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

<b>ORDERING INFORMATION:</b>		
<b>1000 m unit w / 23 m tow cable</b>	Standard	878-000-150
<b>Surface Interface Box</b>	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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