

# 831L PIPE PROFILING SONAR

SKU: IMX-831L

The 831L sonar is mounted in-front of the Blueye X3 and scans in 360 degree pattern to capture the profile of the pipe. The PipeSonarL software produce a 2D profile of a pipe or tunnel up to 12 meters in diameters. During inspection this allows your to see the ovality of the pipe, detect defects or measure sediment build up.

The DVL A50 can be combined with the PipeSonarL software to act as a cable counter, giving you the data you need to produce a 3D model of the pipe.

**Supplier:** Imagenex



## TECHNICAL SPECIFICATIONS

### Hardware Specifications

<b>Frequency</b>	2.25 MHz
<b>Transducer</b>	Profiling type, fluid compensated
<b>Transducer Beam Width</b>	1.4° conical
<b>Range Resolution</b>	0.5 mm
<b>Min. Detectable Range</b>	50 mm (~2")
<b>Max. Operating Depth</b>	1000 m
<b>Power Supply</b>	20 – 32 VDC at less than 5 Watts
<b>Dimensions</b>	61 mm (2.4") diameter x 347mm (13.64") overall length
<b>Weight in Air</b>	1.2 kg (2.6 lbs)
<b>Weight in Water</b>	0.4 kg (0.8 lb)
<b>Materials</b>	6061-T6 Aluminum & Polyurethan
<b>Finish</b>	Hard Anodize
<b>Blueye Integration</b>	Skid mounted underneath Blueye X3 with buoyancy to make the sonar neutral in water

## Software Specifications

<b>PipeSonaL.exe</b>	v1.0.3.0
<b>Windows™ Operating System</b>	Windows™ XP, Vista, 7, 8, 10, 11
<b>Mode</b>	Polar
<b>Range Scales</b>	0.125 m, 0.25 m, 0.50 m, 0.75 m, 1 m, 2 m, 3 m, 4 m, 5 m, 6 m
<b>Train Angles</b>	Continuous rotation, 9° increments
<b>Sector Size</b>	0° – 351°, 9° increments, or Continuous rotation
<b>Step Size</b>	0.9°
<b>Grid Types</b>	Polar and rectangular
<b>File Format</b>	(filename).31L, with ability to export to .xyz point clouds
<b>Blueye Integration</b>	Blueye SDK scripts to publish the DVLA50 odometer as cable counter to PipeSonaL for 3D point cloud generation