blueye

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

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

Software Specifications

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