

Scanning Sonar for Poor Visibility Underwater Environments



US-based Blue Robotics is launching the Ping360 Scanning Sonar, which offers small ROVs the ability to navigate in low visibility water conditions. The Ping360 is a mechanical scanning sonar – it uses a small acoustic transducer mounted on a motor that rotates it in one-degree increments. As it rotates, it transmits and receives acoustic pulses to build a 360-degree image of the surroundings. This is similar to laser scanners and LIDARs used for ground robotics and autonomous cars, but using sound waves instead of light.

Maximum Water Depth of 300 Metres

When mounted on a remotely operated underwater vehicle (ROV), the Ping360 provides the pilot with a top-down image of the surroundings, showing objects nearby like ropes, walls, dock pilings, rocks, shipwrecks, boats, fish, and any other structures or objects that reflect sound waves. The scanning sonar can see objects up to 50 metres away and is rated to a maximum water depth of 300 metres.

The Ping360 operates with Blue Robotics Ping Viewer, an open-source sonar visualization application that can connect to the sonar directly or through an ROV's tether. It works seamlessly with the BlueROV2 underwater vehicle to provide new mission capabilities.