The Aqua Tells: An Extensible GPS Water Quality Robot with Operating System

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Water quality detection in static water usually needs to be carried out by technicians on ship; it will consume manpower and material resources. If sensors are installed on a water robot, technicians on land control the robot to go to a certain position to finish the water quality test; as a result water quality management can be easily achieved. A programed 51 MCU controls the whole robot and transmits back the water quality data. A PC will receive and analyze the data. A modularized water quality system can be easily changed into different modules so that can be adapted to different application. The robot had been designed to include 4 testing modules such as PH, temperature, conductivity, ORP oxidation-reduction Potential, and an oxygen concentration module is currently being designed. This robot is low cost and can be easily marketed.

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