

A simple device for measuring water flow to restore the hydrological monitoring system of Georgia

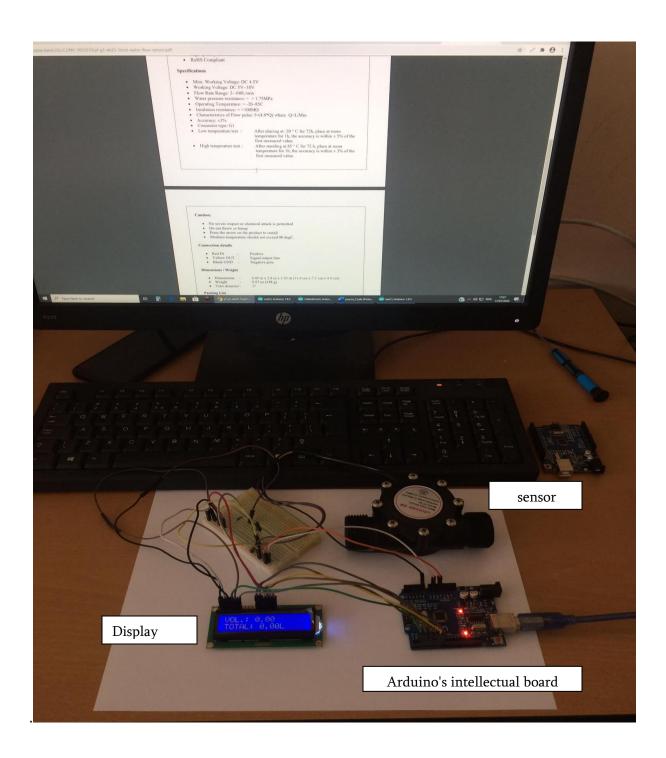


Author: Bachelor Ani Mamniashvili

Supervisor: Master student Revaz Kereselidze

vane Javakhishvili Tbilisi State University Faculty of Exact and Natural Sciences Department of Electrical and Electronic Engineering

The goal of the project is to create a modern measuring device for the hydrological monitoring system. The instrument will measure the speed of the river flow. Modern technologies allow us to make scientific measurements so with proper adaptation, we used a number of mass-produced electronic systems. The flow measurement sensor that we have selected is an electronic and mechanical system, which uses the frequency of current-induced propeller rotation. The sensor uses a magnetic torque sensor working on the Hall effect. The device prepared for the test experiment will be placed on a real compact boat. The sensor will be placed under water, and a smart board of microprocessors will be placed on the boat, which will be used to store information or transmit it to the coast. Technical Prototype After laboratory testing, the device will be offered to hydrology specialists for testing in real conditions on any river in Georgia.



Laboratory test of technical prototype of water flow measuring device