

PROTOTYPE AUTOMATIC WATER CLEANER BASED on Arduino Mega 2560

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ABSTRACT

This study aims to determine how the pH-E4502C sensor works in detecting the degree of acidity or pH (power of hydrogen) of a solution. By knowing how the sensor works, it is hoped that the sensor can be developed as a measuring tool to design a water pH monitoring tool effectively so that there is no delay in controlling the pH of the water and the status of the detected pH. Which can find out the pH level in the water in real-time so that it can control the pH of the water effectively. In the test results, the tool can be used to monitor and display the status of the acidity of a solution in real-time. By using the provisions of the pH value of water less than 6,5 is acidic, more than 7,5 is alkaline, and pH values more than 6,5 and less than 7,5 are neutral. However, when tested on a pH 4,01 buffer solution, a pH value of 4,02 was obtained so that there was a difference in value of 0,01 in an acidic solution.

Keywords: *pH-E4502C sensor, pH and acidity*