

Water level Control System

Abstract:

the design of a water level sensor device that is able to detect and control the level of water in a certain water tank or a similar water storage system. The system firstly senses the amount of water available in the tank by the level detector part and then adjusts the state of the water pump in accordance to the water level information. This electronic design achieves automation through sequential logic implemented using a flip flop. A seven segment display and a relay-based motor pump driving circuit are part of this integrated design. The water pump automatically turns on and starts filling the tank when the water level is empty or level ONE and turned-off and stop filling the tank when water level reaches maximum-level NINE; furthermore, the water pump will remain in its standstill state from level EIGHT down to TWO when the level is decreasing due to water consumption.

Water source is fundamental for all and a significant factor in agriculture, cultivating and it's a key for nature of our life. Monitoring water level of a water supply, For example, Lakes, River, Waterways and Pond etc. Plays a major part in rural and agricultural. Even it's helpful for our every day needs. For example the amount of water drops under the edge level in a bore well, The motor pump may get affected due to dry running. There are many several alternative things wherever water level monitoring is an important task. This report proposes a prototype system design, implementation and description of needed devices and technologies to improve Internet of Things (IoT) based water level monitoring and keep track of frequent evaporation in rivers, waterway, lakes and ponds which can be implemented in future smart villages. Keywords: Water level sensor, Arduino atmega328, IoT.

The main objective of this investigation is to build up a framework to monitor a water level³ of a water source from an inaccessible area. The IoT based system given during this study is going to be useful to attain such task. The prototype system experiment of this study allows keeping track of a water supply from remote area continuously. The real usage of the system would require changes in detector and few alternative technologies and source code in spite of the fact that the system and working rule continue as before.

Evaporation is that the modification of water from a liquid to a gas. Water is constantly dissipating from the surface of the Earth, actually pumping increasingly water vapor into the climate. Water and land surface most of this heat energy comes from the surface, not from the air. At the point when water meets dry air, it's not in equilibrium; water particles evaporate off the surface till the quantity of water within the air creates enough force per unit area to attain equilibrium. Once water is heated to a temperature of 100C, the force per unit area equals that of low-lying atmospheric pressure. Water source is essential and a significant factor in agriculture and farming and it is a key for quality of our life. Monitoring water level of a water source, such as lakes, ponds, rivers etc., plays a key role agricultural. Even it is useful for our daily needs. For example if the level of water drops below the threshold level in a bore well, the motor pump may get affected due to dry running. There are many other situations where water level monitoring is an important task.