JAIN UNIVERSITY
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School of Engineering and Technology
Jain Global Campus, Kanakapura Taluk - 562112
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A Project Report on

"SMART WATER METER"

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BACHELOR OF ENGINEERING

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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ABSTRACT

In this project we are building a prototype model of 'smart water meter'. This project aims at overcoming the disadvantages of the existing analogue water meter i.e. Creepy water meter Reading, Air Valve Problem etc…

Smart meters are major component in building efficient systems for water management. Since smart meters are digitized and automated, high accuracy is maintained reducing human effort.

This meter is provided with GUI for the user to take the readings and configure the device according to the requirement. Direct meter reading for billing is not required since automatic billing is achieved and user is notified through wireless communication.

The incoming water through the pipe is measured in volumetric or mass flow rates, such as litres per second or kilograms per second. These measurements are related by the density of water. The density of water is almost independent of conditions using flow sensor and microcontroller.

The measuring module will provide the measured data of rate of water flow to the microcontroller. The measured data from the microcontroller is stored in external memory chip in the hexadecimal form.