Abstract

The accurate reading of a customer water-meter is important as it is the main revenue base for the water authorities. The traditional data collection process is still common in developing countries despite the inherent inefficiency, inaccuracy and labour intensity. A solution to improvement could be based on sensor and communication technology. In this research an automatic water meter reading system has been designed, fabricated and tested. It consists of G1/2 flow sensor, PIC18F4550 microcontroller, LCD, GSM module and solenoid control valve. When water flows through flow sensor, pulses are generated which are converted to volumetric flow using PIC18F550. The LCD displays the readings which are sent automatically to the Water Company as an SMS for billing purposes after a specified period. The proposed system is cost effective and gives automated water meter reading at high accuracy.

References

applied in ultrasonic water meter based on Zigbee. Indian Journal of research4: 47-50.


Index Terms

Computer Science

Communications
Keywords

PIC18F4550 microcontroller, GSM module, sensor, LCD display.