TRUE WIRELESS AUTOMATIC WATER LEVEL CONTROLLER

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Abstract

This paper presents the design and implementation of a True wireless Automatic Water Level Controller that uses an ultrasonic sensor and ESP microcontrollers on both the sender and receiver sides, ESP-NOW protocol for wireless communication, and a solar panel for power. The system is designed to reduce water wastage and is equipped with a 128 x 64 display to show the current water level of the tank on the receiver side. The use of ESP deep sleep on the sender side ensures power savings, and the wireless communication using ESP-NOW protocol ensures accurate and real-time data transmission between the two sides. The system has been tested and found to be highly effective and reliable in operation. The paper concludes with potential areas for further development and improvement of the system.

Keywords---Water Level Controller, ESP-NOW.

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