

**Transmisi Data Sensor Tekanan Dan Tegangan 3 Fasa Pada Panel Sumur Bor Berbasis *Internet of Things* Menggunakan Es8266 (*Transmission of Three-Phase Pressure and Voltage Sensor Data in Internet of Things-Based Water Well Panel Using Es8266*)**

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**ABSTRACT**

Data transmission involves the process of sending data from a data receiver through a specific transmission medium to provide information on water pressure and three-phase voltage in an Internet of Things-based Water Well. Traditional methods, such as using LCDs, notes, and photos, prove inefficient, lack remote monitoring capabilities, and cannot store acquired data. The adoption of the Internet of Things is crucial to aid employees, particularly those at PERUMDA Tirta Baluran in the Situbondo Regency, in monitoring water pressure and three-phase voltage in the well. This research aims to develop a Transmission System for Pressure and Three-Phase Voltage Sensor Data in Water Well Panels. The system sends data to a database and emails in case of remote data failure, utilizing the Internet. Test results indicate the system successfully reads sensor data, transmits it to the database and the main page of the website, with the application reading the system every 2 seconds. Successful testing of data transmission and reading from the Microcontroller to the database and website application highlights that the speed and accuracy of data transmission depend on the Internet's speed and stability.

Keywords: Data Transmission, Internet of Things, Three-Phase Voltage, Water Well Panel, Sensor Data, ESP8266, Remote Monitoring, PERUMDA Tirta Baluran