

## ABSTRAK

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Rancang Bangun Meteran Air Digital Prabayar Dilengkapi *Monitoring* Jarak Jauh

Sistem meteran air PDAM di Kota Cilegon masih menggunakan meteran air analog dan sistem pascabayar. Pada penelitian ini, akan dirancang sistem meteran air digital prabayar yang dilengkapi *monitoring* jarak jauh. *Flow water sensor* SEN-HZ21WA digunakan untuk membaca volume air yang mengalir. *Solenoid Valve* digunakan sebagai katup buka / tutup pada aliran air. *Keypad* 4x4 digunakan untuk memasukkan variabel jumlah volume air. Sistem meteran air ini menghasilkan rata-rata *error* sebesar 0,30% pada volume air 1 liter, rata-rata error sebesar 7,46% pada volume air 2 liter, rata-rata error sebesar 13,58% pada volume air 3 liter, rata-rata error sebesar 12,73% pada volume air 4 liter, rata-rata error sebesar 16,99% pada volume air 5 liter, rata-rata error sebesar 12,91% pada volume air 6 liter. *Monitoring* jarak jauh yang dilakukan pada penelitian ini menggunakan *interface thingspeak*.

**Kata kunci:** Sistem Meteran Air Digital Prabayar, *Interface Thingspeak*

## ***ABSTRACT***

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### Design Prepaid Digital Water Measured System With Monitoring System

PDAM of Cilegon city still uses analog measured of water and payload systems. In this research, a prepaid digital water measured system will be designed that is equipped with monitoring system. SEN-HZ21WA flow water sensor is used to read the volume of flowing water. Solenoid Valve is used as an open / close valve in the water flow. The 4x4 Keypad is used to enter a variable amount of water volume. This water meter system produces an average error of 0,30% at 1 liter of water volume, the average error is 7,46% at 2 liter of water volume, the average error is 13,58% at 3 liter of water volume, on average error of 12,73% at 4 liter of water volume, average error was 16,99% at 5 liter of water volume, average error was 12,91% at 6 liter of water volume. Monitoring carried out in this research using interface thingspeak .

**Keywords:** Prepaid Digital Water Measured System, Interface Thingspeak