

## **ABSTRACT**

*In everyday life, water is one of the natural resources that is very important for humans, one of which is used daily for drinking or consumption. The Regional Drinking Water Company (PDAM) is a regional-owned enterprise engaged in the distribution of clean water for the community. The water contained in the PDAM must first meet the water quality requirements. To distribute water, PDAMs must first pay attention to whether the water quality is adequate or not in order to provide the best water quality for the wider community.*

*This tool can be used to monitor water quality information in the PDAM pipeline network, which includes the level of turbidity in water using a Turbidity sensor, concentration levels of solid objects dissolved in water using a TDS (Total Dissolve Solid) sensor, measuring acid or base using a pH sensor, measuring temperature using a temperature sensor, and measuring oxidizing or reducing substances in water using an ORP (Oxidation reduction potential) sensor. Later this tool can be carried anywhere or portable to make it easier for PDAM employees to monitor the quality of water in the PDAM pipeline network, especially those in Madiun.*

**Keywords:** *Quality, Water, Sensor, Temperature, pH, TDS, Turbidity, ORP, Portable*