ABSTRACT

Every living thing needs water to support the needs of daily life, especially humans. However, most of the population consumes drinking water that does not yet know the exact quality of the water drunk, especially water that comes from springs and well water. Designing in this study, a turdibity sensor is needed to determine the turbidity of water that is suitable for consumption or not and a TDS (Total Dissolved Solid) sensor to measure dissolved solids in water. The test water uses well water, spring water, and bottled product water. The measurement values are displayed on the LCD and the Blynk app as Internet of Things devices. The results of water quality testing show that based on the calculation of the Simple Additive Weighting Method, the quality of spring water is better when compared to well water both before and after boiling. Each water sample has an average value, namely well water before boiling of 35.13 NTU and 309.6 PPM, well water after boiling of 15.6 NTU and 207.06 PPM, spring water before boiling of 45.67 NTU and 347.33 PPM, and spring water after boiling of 24.06 NTU and 254.13 PPM.

Keywords: Turdibity Sensor, TDS Sensor, Internet Of Things, Simple Additive Weighting.