

## ABSTRACT

*One of the important parameters in sterilization is the temperature to remove bacteria. The purpose of measuring the temperature on a dry sterilizer is needed to find out whether the temperature is in accordance with the settings made, because if a tool used or operated continuously will have an impact on the performance of the tool. Measurements are usually carried out by recording time and temperature with a system that is still manual, with technological advances being developed with an automated system accompanied by training. The purpose of this study is to find out every change and decrease in temperature automatically by utilizing external storage to view previous data measurements. A data logger is defined as an electronic device that automatically records, retrieves data with high speed and greater efficiency during tests or measurements. This study uses a thermocouple sensor as a temperature sensor. This module features RTC DS3231 as real time clock and SD Card as external storage. The display used in this module is a 20x4 Liquid Crystal Display (LCD). This module is compared with a comparison tool BPFK Surabaya in the form of a Data Logger brand YOKOGAWA MV2000 known that error values found lowest error at T1, T2, T3, T4, T5, T7, T8 at a temperature setting of 150°C by 0.22% and the highest error at T9 point at 50°C is 1.99%.*

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**Keywords:** *Data Logger, Temperature, Thermocouple, SD Card*