ABSTRACT

Temperature data logger is a tool used to measure the temperature of a dry sterilizer. The purpose of this study is to facilitate the recording of temperature data on the sterilizer. The temperature sensor used is a thermocouple sensor. The temperature detected by the thermocouple sensor will be processed in the PSA circuit which will then enter the ATMEGA 2560 as a data processor. The temperature reading results will be displayed on the 20x4 character LCD display. The temperature reading data will be stored on the SD Card which aims to facilitate data reading on a Personal computer (PC).

Based on the results of data measurements and comparisons, the error value is obtained at a temperature of 50° C with the smallest error value of 1.6 and the largest value of 12.8. At a temperature of 100° C, the smallest error value is 0.3 and the largest is 11.7. Then at a temperature of 120° C the smallest error value is 08 and the largest is 6.6.

Kata Kunci: Data Logger, Thermocouple, Sterilizer