

## ABSTRACT

*Thermocouple (Thermocouple) is a type of temperature sensor used to detect or measure temperature through two types of metal conductors, whose working principle is that each end of a metal conductor is combined to create a "Thermoelectric" effect. One type of metal conductor contained in a thermocouple will serve as a reference with a constant temperature (fixed), while a metal conductor functions as a metal conductor that detects hot temperatures. Sterilisator is a device used to sterilize medical instruments to avoid the bacteria that attach to the remainder of the use of medical instruments. The temperature of the sterilizer varies but generally for dry sterilizers ranges from 175 ° Celsius. From the above problems, the author wants to develop a "4 Channel Sterilizer Calibrator", Using the Arduino Nano Atmega328 as a minimum system, K type thermocouple and MAX6675 module as a sensor. Measurements were made by comparing modules with standard measuring instruments, obtained the smallest error 0.2% at T3 and T4 when measuring 100 ° C, and the largest 4.4% at T2 when measuring 150 ° C.*

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*Keywords: Thermocouple, Sterilizer, Arduino*