

ABSTRACT

Fever is one of the symptoms of someone affected by the corona virus or Covid-19. Checking body temperature is one way to prevent transmission of the corona virus in public places. One tool that is widely used to check the temperature in public places is a thermo gun. The thermo gun has the disadvantage that it can only detect the temperature of one person and still requires someone to use it, so it will be more optimal if the tool used to check the temperature uses a thermal camera. This study aims to study the effect of the temperature of the object and the distance of the object to the thermal camera on the results of temperature detection by the thermal camera. And design the temperature controllable heat source test object. The results of this study obtained a heat source test object which temperature can be adjusted by adjusting the current entering the Peltier. Then from a distance range of 5 – 30 cm, the optimal distance for the thermal camera to detect object temperature is 5 cm, and the thermal camera can detect the temperature optimally in the temperature range of 35°C - 40°C. From this research, the equation of the line is obtained to correct the reading value by the thermal camera.

Keywords : *Thermo Gun, Thermal Camera, AMG8833*