

## ABSTRACT

### **Design and Build a Microcontroller-Based Automatic *Hand Sanitizer Pump* *Web Dashboard* Using the *Prototype Method***

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With the covid 19 virus and the number of infected patients increasing day by day, health procedures must be implemented in the Kampili Village office to maintain good hygiene, wear masks and wash hands frequently. Therefore, the best way to prevent various diseases is to wash your hands with soap and water. To support Kampili Village to avoid covid 19, the researcher took the initiative to make an automatic hand sanitizer pump. Because especially when the correspondence process in the Kampili Village office is quite dense and also the use of Handsanitizer is still lacking in application, therefore, it is necessary to have a tool that can be used to clean hands, namely a microcontroller-based automatic hand sanitizer pump. This is one solution, namely in the manufacture of an automatic hand sanitizer pump, using ultrasonic sensors, temperature sensors and water sensors. From the design process, it will produce a temperature sensor that functions to check body temperature, check the water content in the temperature sensor, and the proximity sensor, then it will appear on the system which will be displayed via the Web Dashboard. Based on the research process, the researchers succeeded in implementing tools that could be useful for existing activities in the Kampili Village office and could be useful for the future at the Kampili Village office.

**Keywords:** *covid 19 virus, touchless, microcontroller, sensor.*