

# ***SMART DRY BOX DESIGN FOR DSLR CAMERA WITH TEMPERATURE CONTROL BASED ON NODEMCU ESP8266 AND ANDROID APPLICATION***

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## ***ABSTRACT***

*The development of the camera evolves following existing technology, making manual cameras or Single Lens Reflex (SLR) begin to be replaced with Digital Single Lens Reflex (DSLR) cameras. The efficiency of using Digital SLR cameras from all aspects makes this camera the main choice for both previous and new photographers to switch to using a DSLR camera. Digital cameras consist of several parts that are prone to damage, in this case, it requires good handling in terms of maintenance and storage. Mistakes that often occur so far are camera storage that does not pay attention to room temperature which can cause mold growth on the sensor, view finder, optics, or on the lens. The purpose of this study is to apply IoT technology whether the IoT method can be implemented on the Smart Dry box. By using the system design method, namely prototyping. This design uses a simulation tool, which when maintaining the temperature in the box must be in accordance with camera storage standards or the room temperature is in the 24°C-26°C temperature range. Heater and fan that will be the output and temperature regulator when conditions occur when the temperature is outside the provisions. The test results produce a smart dry box tool for DSLR cameras with temperature control based on nodemcu esp8266 and an android application. The success rate of IoT implementation on smart dry boxes using nodeMCU ESP8266 and monitoring on android applications reaches 100%, with the results of calculating the percentage of success of the system's ability to control automatically.*

***Keywords :*** *Camera, Temperature, DSLR.*