

## ***ABSTRACT***

*Grain is the main commodity and the main source of basic food needs for the Indonesian population, where most Indonesians routinely consume rice as their staple food. Storage temperature can affect quality. It is commonly known that the storage period of rice depends on the environmental conditions, but if it is too long, it can lead to quality deterioration. The purpose of this research is to monitor the condition of harvested grain storage using the Internet of Things (IoT) system. This research uses DHT22 sensors to read the temperature and humidity in the grain storage room, ESP32 as a microcontroller and LCD as a system reading output and uses the telkom IoT platform for remote monitoring. The results obtained show that the accuracy of all DHT22 sensors in this design has a high accuracy above 90% in temperature measurement and above 93% in humidity measurement, and has a high precision value above 92% in temperature measurement and above 83% in humidity measurement.*

***Keywords :*** *Rice, DHT22, internet of things, humidity, temperature*