

ABSTRACT

Logistics is a science / art that is accompanied by a process regarding the storage, distribution, maintenance and deletion of certain goods or tools. Transportation is the main activity in logistics activities, where the management of transportation activities must be able to ensure the delivery of goods can be carried out effectively and efficiently from one location / company to the recipient in a timely manner, the right amount, the right quality and the right receiver.

Therefore in this final project a food temperature detection system in cargo logistics is designed to carry out the monitoring process according to the concept of IoT (Internet of Things). The use of Arduino Uno microcontroller and DS18B20 sensor, GPRS with sim 900A. Using a php-based web proxy, firebase cloud storage as data storage, and display in the form of a website.

Based on the results of testing that has been done, the DS18B20 sensor has an accuracy of 97,692% and a variance constant value of 0.625303%. Data transmission via GPRS communication when indoor has 44 seconds delay and at indoor time of 48 seconds. Sending alerts from firebase to telegram is 0.073 seconds. Reability Testing in data communication is 98.184% and Availability of 98.2206% . The average firebase delay to telegram is 0,073% seconds.

Keywords: Logistics, GPRS, cloud storage