

ABSTRACT

Along with the times, technology has also developed very rapidly in various fields, one of which is the Internet of Thing (IoT). The development of the Internet of Thing (IoT) allows in the future the use of computers to dominate human work and defeat human computing capabilities such as controlling electronic equipment, because IoT (Internet of Things) can remotely control electronic equipment using internet media. Currently the use of sensors on the fuel tank is only used on the monthly fuel tank, while the daily fuel tank does not use the sensor. Therefore, this Final Project (TA) aims to (1) determine the volume of fuel in the daily tank, (2) develop a special sensor design for the daily tank.

The results of the study show that (1) the depth of the fuel discharge can be monetired in real time via the BOT telegram or firebase. (2) The design for measuring the daily fuel discharge in the tank uses an integrated Ultrasonic HC SR-04 sensor via Telegram. The integration of the ultrasonic sensor with the Nodemcu ESP32 to read the height of the fuel volume can be well connected and can read the water level well. The test results of the average delay measurement is 0.4477897 s. The result of the average throughput is 14476.66249 kbps.

Keywords: *Indiesel, sensor, fuel tank*