ABSTRACT

Air compressors have many benefits in daily life, one of them is on the industrial side. In fact the industries does not pay attention to the condition of the compressor, because it is considered inefficient if the compressor is supervised by a worker.

As technology develops, compressor monitoring systems can be found easily. By using the Internet of Things platform. Monitoring system is a system that supervises a work that is being done to ensure the engine performance running well. Therefore we as writers want to make a tool that can reduce errors that occur as a result of unmonitorized compressor.

The results obtained based on testing that the Internet-based air compressor monitoring system was successfully realized by integrating the HMCT103C current sensor, ZMPT101B voltage sensor, GY-906 MLX90614 temperature sensor into the microcontroller and based on the Internet of Things. The accuracy value of the HMCT103C sensor is 97.94%. The ZMPT101B sensor accuracy value is 99.44%. The accuracy value of the GY-906 MLX90614 sensor for Celsius is 99.93%. In testing of Wi-Fi module Nodemcu ESP8266, the value of delay is 34.7 seconds and the packet loss is 0%.

Keywords: Monitoring Systems, Compressors, Air Compressors, Internet of Things.