

## ABSTRACT

Air pollution or pollution is the presence of one or more physical substance, chemical or biological in atmosphere, the amount that could endanger human health, animal, and plants, also disturb the aesthetics and comfort. Air pollution can be divided into two, primary pollution and secondary pollution. Contamination of primary pollutants are substance directly arising from air pollution source. Carbonmonoxide is an example of primary air pollution, because it is the result of flue gas. Indonesia is the country with the highest air pollution level of the third world, this is possible because of the low level of public awareness of Indonesia to the environment or perhaps also because of difficulty to knowing the data Indeks Standar Polusi Udara (ISPU) at the point pollution, which will impact on the slow handling of the problem air pollution in the region.

At the end of the assignment was designed and realized a system that can be use to determine the air quality data at a point of detection and these data can be monitored and accessed remotely. System made generally consists of two block, first block is block detector (Embedded System) which is placed at critical points and pollution monitoring block located on monitoring station. Sensing data transmission result in a detector block communicated utilizing GPRS (*General Packet Radio Service*) to continue to update the data.

It is expected that the system has been realized, could help to determine the level of air pollution or air quality at a point in a region with a more efficient and faster. So that the handling of the problem of pollution also can be done quickly.

Key words: monitoring, air quality, GPRS,