Abstract

The Home security is needed even when an owner has to left home. There are 2 dangers that need to be attention by home owner that is the danger of theft and gas leak. Based on data from BPS (Badan Pusat Statistik) *in 2011-2013, the number of theft cases such as housebreaking was above 45,000 cases per year. For the case of gas leak or gas tube explosion based on data from* BPKN (Badan Perlindungan Konsumen Nasional) *in 2007-2010 was increase every year.*

Therefore, built a device "Smart Surveillance" security system which aims to help users to increase home security. The security system has a work system to detect the movement of objects in the front area of door with ultrasonic sensor and send notification in the form of photos to the user's smartphone. The device also equipped with gas sensor to detect gas leak and solenoid door lock for control door locking with applications on Android smartphones.

Smart Surveillance security system provides a security system based on Internet of Things (IoT). Users can monitor the house with photos from the camera, receive danger notification of homebreaking and gas leakage and can control multiple devices using apps from Android smartphones.

Keywords: *housebreaking, security system, gas leak, smartphone*