ABSTRACT

In a BTS (Base Transceiver Station) there are modules and supporting devices such as batteries, rectifiers, optical cables, and others. These devices are placed in a closed rack with a manual lock security system whose key is only kept by the technician of each provider. BTS monitoring can currently only be done through the Huawei U2000 application and only focuses on the performance of the device. A security system like this can possibly cause frequent cases of theft of several devices or modules on the BTS which resulted in huge losses for each provider.

In order to solve the existing problems, there are ideas to create an additional security system called "Smart Door". The system works by determine if there is any activity on the area around the BTS module storage rack, then the activity will be detected by the sensor and recorded by the camera module. By utilizing a sensor mounted on the door of a BTS module rack, officers can monitor the activities around the storage rack of BTS modules in real time through BTS monitoring applications.

The system can tighten security on each existing BTS. The theft will also be known by the officer early because he knows other activities on a BTS that are not in the maintenance by the officer. The installation of the Smart Door system can also help reduce the number of criminal acts in the form of BTS device theft that has often occurred.

Keywords: IoT, Smart Door, MySQL, Raspberry Pi.