

## Abstract

At present, if you are going to enter the Telkom University area using motorized vehicles, you must use a student identity card or an employee to access the gate. This is so that not everyone can be free to enter the campus area to carry out activities and also as a safety standard in order to be able to verify whether the vehicle entering with the vehicle comes out the same. But the use of RFID which requires drivers to tapping when they want to enter the dictionary area often causes a long queue. The time needed by a car to carry out RFID tap activities up to the opening gate requires at least 2-5 seconds. This time is quite long because if there are 5 cars coming together then the time needed for the gate to serve all queues is 30-60 seconds. While with Active RFID technology when the vehicle arrives can be identified with only 1-2 seconds. Even vehicles that want to enter do not need to stop and do the tapping. The time that can be generated by active RFID technology is also quite good because it can save waiting queue time for 20-30 seconds which means it can reduce the length of the queue at the entrance or exit.

*Keyword:* Active RFID, Vehicle, Parking lot, Gate