

# Study on Safety Distance Model of fleet based on vehicle communication - More about communi -

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## 1. Introduction

The device will already know the area of the car therefore it will automatically connect or disconnect the phone when in range (as long as the car is switched on). The device will cut the wifi signal through a server which doesn't allow a phone to wifi access, however it does allow it to have signal access so the phone can still receive and make phone calls (in case of an emergency).

## 2. How will the device connect to the phone and cut the signal?

The device connects to the phones inside the vehicle through an online server (which is the perimeter of the car) not allowing online service but allowing signal. Parts of the jammer device Figure shows the block diagram for the jammer to be designed. The wire that will connect to the car battery. As long as the wire is connected the device will automatically turn work when the car is switched on. This is the device that will hold the artificial intelligence which will automatically cut wifi signal from a mobile phone which is detected within the device range.

**3. System Design of Signal Jammer ; Power calculations** Here, we need to find the power that is needed to be transmitted to jam any cell phone with driving within a distance of around 10 meters for DCS. From the above considerations, we can find the required output power from the device, as follows: Using SNR=9 dB and the maximum power signal for mobile receiver=-15 dBm, gives  $J=-24$  dBm. But, our goal is to find the output power from the device, so when we add the free space loss to the amount of power at the mobile receiver we get our target:  $\text{Output power} = -24\text{dBm} + 58\text{dB} = 34\text{dBm}$

## 1. Why?

Many accidents worldwide are caused due to the distractions our phones cause us. Therefore this will not allow the driver to have access to wifi through their phone, leading them to focus on the road more. The aim is a decrease in road accidents. Communi (a shortcut for the word communications) is a device which cuts WIFI signal from smartphones when entering a car. The communi device connects to the car through the car battery, it connects to the car and reads the data of the car, it also turns on/off as the vehicle is turned on/off.

## 4. ABSTRACT

This report presents the design, implementation, and testing of a cellphone jammer. This jammer works at GSM 900 and thus jams the three well-known carriers, (etesalat,

Du, Vodafone).

## 5. Conclusion

As we tested our jamming device, the result was a full success. The device was able to jam the three cell phone carriers: etesalat, Du. The effective jamming range was around 0-5 meters. This is more than what it was designed for. The reason is that in our calculations, we considered the worst case of having the cell phone in the car when start driving. It is expected that as the distance between the cell phone and the driving

## Results;

[1] the effective jamming distance will increase

There will be a significant reduction of accidents

[2] there is no need To repair the car or compensate other people

[3] injuries also and there is a traffic commitment to the rules of traffic

[4] the insurance companies will be very low prices because of the device because the device prevents the use of the Internet while driving

