Topics in Coding, Cryptography and Information Security

Editors:

Mohammad Umar Siddiqi
Sigit Puspito Wigati Jarot
Othman Omran Khalifa

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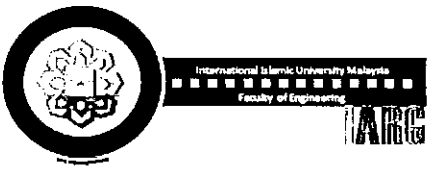

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Contents

Chapter 22

Design of Mobile Phone Jammer

Fauzun Abdullah Asuhaimi, Nur Fatin Mohd Zakki, and Khaizuran Abdullah

22.1. Introduction

Mobile Phone Jammer is a device used to prevent cellular phones from receiving signals from base stations. When used, the jammer effectively disables cellular phones. These devices can be used in practically any location, but are found primarily in places where a phone call would be particularly disruptive because silence is expected. In order to jam the phone, it is important to know the frequency of service provider in Malaysia as instructed by Malaysian Communication Multimedia Corridor (MCMC). Only jammer that transmits the same frequency as mobile phone will be able to jam the signal.

Apart from frequency, the transmit power of RBS also plays important role in the signal strength. By knowing this power we will know what is the suitable power transmits by the jammer to block the entire mobile phone signal. The jammer need to have same or more power than the phone to jam the signal.

If the jammer has wide frequency ranges, it might block the signal of other application like radar. Since this jammer is only concern to jam mobile phone only, the design of selective frequency jammer can be put into consideration. This selective jammer will choose the frequency to jam the mobile phone since the frequencies are different depending on the service provider. Thus we would suggest developing this current jammer to selective frequency jammer that will increase the efficiency of the jammer.