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5TH GENERATION OF WIRELESS COMMUNICATION: 5G REQUIREMENTS, INTERNET OF THINGS, RADIO OVER FIBER AND PLAN

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ABSTRACT

In this article, we are going to briefly discuss the issues related to 5G. Beginning with evolution of internet communication from 1G up to 4G, this article also will explain some key performance of 5G and basic requirement for 5G, the era of Internet of Things, the application of the radio over fiber technologies and the companies plan in facing the 5G's era. There are six key performance indicators for 5G and eight requirements for 5G. This article summarizes the application of radio over fiber (RoF) for indoor (inside building) and outdoor (more than 1 building such as metropolitan area) and also discuss how RoF works. The 5G is the key for Internet of Things (IoT). Understanding the concept of IoT will give us the idea on how the future will be like and devices can communicate with each other. The telecommunication companies start to do research on 5G technologies. Some of them are trying to lead this technology such as Verizon in the United States and Huawei in China. These companies work together with other telecommunication leaders to bring 5G to live.

Keywords: 5G, wireless communication, radio over fiber technology, Internet of Things (IoT)

