

ABSTRACT

In the era of overcrowded digital communication world, Li-Fi is a new way of wireless communication that uses LED lights to transmit data wirelessly. Transmission of data is one of the most important day to day activities in the fast-growing world. The current wireless networks that connect us to the Internet are very slow when multiple devices are connected. Also, with the increase in the number of devices which access the Internet, the availability of fixed bandwidth makes it much more difficult to enjoy high data transfer rates and to connect a secure network. Radio Frequency (RF) has limitation in bandwidth can't support the growth in demand for high data rates and the large numbers of communication systems. Li-Fi has got a much broader spectrum for transmission compared to conventional methods of wireless communications that rely on radio waves. Instead of using modems, Li-Fi uses LED bulbs with transceiver. Data transmission in Li-Fi is about 100 times faster than Wi-Fi. Here, in this paper we explore the need for Li-Fi and its applications.