

ESP1865

Patient Monitoring System

This paper focuses on the patient monitoring in the hospitals using the Li-Fi technology. Li-Fi stands for Light-Fidelity. Li-Fi technology, proposed by the German physicist Harold Haas, provides transmission of data through illumination by sending data through an LED light bulb that varies in intensity faster than the human eye can follow. Li-Fi is a bidirectional, high speed and fully networked wireless optical communication and is a form of visible light communication. The proposed model helps in the Patient monitoring in the hospitals and can be done by using the concept of Li-Fi instead of the Wi-Fi technology to avoid the frequency interference with the human body. Sensors such as temperature, heartbeat, glucose and respiration used in this model perform its respective functions. These sensors collect the data from the human body and are converted in to the digital form using the analog to digital converter and the outputs of these sensors are given to the microcontroller. The microcontroller that is used here is PIC16F877A. The output from the microcontroller is fed to the Li-Fi module which transmits the data in the form of light and the receiver end collects this data and then displays the graph for the different parameters using the PC. This report of the patient can be sent to the concerned person through e-mail.