

* Infrared Communication :-

Infrared is a Wireless Communication technology that is used for communication over short ranges: it uses infrared band from 430 THz to 300 GHz and having wavelength of 980 nm. Such waves are used for transmission and reception of data. This communication can be between a portable device and a fixed device.

there are two types of infrared communication.

Infrared Communication

- a) Point to Point
- b) Diffused Point

a) Point to Point :-

It requires a line of signal between the transmitter and the receiver. It means the transmitter and the receiver should be pointed to each other and there should not be any obstacle between them.

Eg - It is used in remote control of our set up box.

ii) Diffuse point :-

It does not require any line of sight and the link between the transmitter and the receiver is maintained by reflecting or bouncing of the signals by the surface like ceiling, roof, etc.

Ex = wireless LAN Communication System

Advantage of Infrared Communication

a) Infrared Communication has high directionality and can identify source. This way it can work point to point maintaining security.

b.) Safety :-

Infrared radiation does not having our body. hence it is safe to use any where.

c.) High Speed Communication :-

Infrared provides high speed communication in gega byte per second. hence it is suitable for internet communication.

Disadvantage

a.) works only in small area and inclosed area.

b.) It is disturbed by obstacles.

c.) If it is goes outside a building there it may be used in authorised way giving security problem.