Infrared

It is a wireless transmission media that sends signals using infrared light waves. An infrared wave lies in between visible light spectrum and microwaves. Infrared transmission requires a line of sight transmission that is the sender and receiver must be aligned so that nothing obstructs the path of infrared light wave. Unguided infrared is widely used for short-range communication. Because of high frequency range, Infrared do not cross wall like obstacles.

The remote controls used on televisions, VCRs, and stereos all use infrared communication. Many computers and devices have an IrDA port that enables transfer of data using infrared light rays. Transfer rate= 1 Mbps- 4 Mbps .It has wavelength of 700 nm to 1 mm and frequency ranges from 300 GHz to 430 THz.

They are relatively directional, cheap, and easy to build but have a major drawback: they do not pass through solid objects. Infrared waves do not pass through solid walls well is also a plus. It means that an infrared system in one room of a building will not interfere with a similar system in adjacent rooms or buildings.