Satellite

This is a space station that receives microwave signals from an earth-based station, amplifies the signals, and broadcasts the signals back over a wide area to any number of earth-based stations. A transmission from the earth to a satellite is called an uplink; a transmission from a satellite to an earth station is called a downlink. Communication satellites are used in application such as air navigation, television and radio broadcast, videoconferencing and paging. Transfer rate = Up 10 1 Gbps. Communications satellites are usually placed about 22,300 miles above the Earth's equator and moves at the same rate as the Earth.

Applications of communications satellite include television and radio broadcasts, videoconferencing, paging, and global positioning systems.

Advantages of satellites

Lots of data can be sent simultaneously.

Allow high quality broadband communication across continents.

Disadvantages of satellites

The fee to launch a satellite is extremely expensively.

The infrastructure needed to access satellite communications is also expensive.