

Distinguish, differentiate, compare and explain what is the Difference between Analog and Digital Signal. Comparison and Differences.

## **Difference between Analog and Digital Signal**

1. Analog signal produces a continuous signal. Digital signal produces a discrete signal.
2. Analog Signal is continuous in a time and can assume an infinite number of values in a given range. Digital signal is not continuous in a time and assumes only a limited number of values.
3. Analog signal is denoted by sine wave. Digital signal is denoted by square wave.
4. Analog hardware is not flexible in implementation whereas digital hardware is flexible in implementation.
5. Analog signal store data in form of wave signal. Digital signal store data in the form of binary bit.
6. Analog instrument consume more power. Digital instrument consume less power.
7. Analog signal generation is of low cost and portable. For e.g.: thermometer. Digital signal generation is expensive and not easily portable. For e.g.: computers.