

Introduction

This page compares Bluetooth 5 vs Bluetooth 4.2. The basic features of Bluetooth 5 which has made it popular for IoT(Internet of Things) and Bluetooth Beacon markets. Bluetooth 5 is the latest Bluetooth specifications the successor to Bluetooth 4.2 version. The Bluetooth 5 is backward compatible with previous Bluetooth versions such as v1.2, v2, v2.1, v3, v4, v4.1 and v4.2. The specifications address the requirement of IoT devices which is lower power, longer range and higher speed. Due to these features, you could find Bluetooth 5 being incorporated in smart phone devices coming up in the early 2017.

Source: <http://www.rfwireless-world.com/Terminology/Bluetooth-5-vs-bluetooth-4-2.html>

Difference between bluetooth 5 & 4.2

Specifications or features	Bluetooth 5	Bluetooth 4.2
Speed	Higher, twice compare to Bluetooth 4.2 version Supports about 2 Mbps	Lower, Supports about 1 Mbps
Range	Higher, four times compare to Bluetooth 4.2 version Supports 200 meters in Line Of Sight (LOS) path in outdoor environment, Supports 40 meters in indoor environment	Lower, Supports 50 meters in Outdoor, Supports 10 meters in indoor
Power Requirement	Low	High
Message Capacity	Large, About 255 bytes	Small, About 31 bytes which gives just 17 to 20 bytes for actual data payload
Robustness to operate in congested environment	More	Less
Battery Life	Longer	Shorter
Security Control	Better	Less secure compare to Bluetooth 5.0
Theoretical Data Throughput	2 Mbps, gives about 1.6 Mbps with overhead	1 Mbps
Reliability	High	low
Digital Life	Better	Less better compare to Bluetooth 5
Support for IoT devices	devices Yes	No
Bluetooth Beacon	Beacons have become more popular due to speed and range increase in bluetooth 5 version.	Beacons were less popular due to less speed/range as well as low message capacity of about 31 bytes.

