



# 5G Wireless Network and it Applications in the Industry

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## DESCRIPTION

5G is wireless network and it is a 5th generation mobile network. 5G play an important role to make business more efficient to make consumer experience faster network compared to before networks like 4G. 5G expected to play an immersive role and use in many sector like industries, smart communications, education. The coming future rely on 5G network.

5G wireless technologies deliver the data in very higher multi-Gbps peak data speeds. It has much advantage like ultra-low latency, more reliability, massive network capacity, increased availability. Because of its higher performance and raised efficiency empower and make new user experiences and connects new industries.

Many Wireless carriers and small scale communication providers are interested to use 5G network because they deliver in good broadband network that can provide high definition streaming video without interruption and buffering. In field of intelligent edge

computing, it operates at the differentiation of 5G's ultra-low latency, IoT, and AI technologies. Devices and applications an edge cloud computing resources without any need of access of centralized data junction which is potentially thousands of miles away.

As 5G edge computing becomes more prevalent, So the industries will be able to increase the scale up their use of data and act faster and more efficiently.

## 5G Application in industry

The use of 5G aqueduct to process and analyse large amount of data so the range of industries expected to generate and produce effectively so business value increases.

The Enterprises goal is to reduce ownership cost and to increase the revenue and also give the costumer good and quality services. So they are expecting major benefits and up gradation of 5G network.

## Healthcare

5G uses in healthcare allow the doctor and patients to connect easily and the smart devices that can be wearable are more useful it will help the doctor to get alert during emergencies.

For 5G retail applications. Stores look more advance in technology we can add items to virtual cart rather than shopping the products with the physical one. The stores may manage stocking in real time. Without the cashless store they can simply track your cart in checkout line.

## Agriculture

The Farming became easy and the future will use more data and less number of chemicals. The data collected by the sensors located directly in fields, so it became easy for the farmers to identify with accurate precision and get the knowledge which areas of field need water and to predict the disease, and amount of requirement of pest management.

With more precision health data of the plants, farmers can reduce the use of insecticides without compromising the safety of the food supply.

## Manufacturing

By the use of 5G network the industries transform into advance system by use of artificial intelligence and IoT. So it help the industry or the factories to minimize maintenance and reduce the man power which may be advantage and also minimize the downtime With use of 5G the degree of precision raises.

With the connectivity boost provided 5G provide the connectivity boosting which help the manufacturers change and advance in many aspects like streaming them with sensor technology by using artificial intelligence and IOT instead of using traditional way of quality assurance.

## CONCLUSION

5G is a new wireless standard network which offers faster speeds and efficiency compared to other network provides more coverage by a factor of 1000. The greatest potential of 5G lies in its extraordinary level of network responsible for millions of IoT devices. Since 5G operates on new spectrum of radio waves it requires entirely new infrastructure that cost high. It is expected to desperately accelerate within the next decade.