Long distance wireless communication without base station

What factors affect long-range wireless performance?
The factors th at affect long-range (LR) wireless performance are the same or similar factors that affect satellite communications as stated,frequency,latency,power,distance,interference,and weather(Benouakta,et al.,2023).

What is the difference between LRLP and short-range wireless networks?
In comparison, short-range wireless network examples include Bluetooth, infrared, Wi-Fi, and even WiMax (WiMax is used in both short and long-range WANs). LRLP wireless networks use low-power and long-range wireless technologies, such as SIGFOX, Ingenu, and LoRa, to connect IoT devices.

What is radio wireless technology?
Radio wireless technology uses electromagnetic waves with frequencies below 1000 MHz,corresponding to wavelengths longer than 30 centimeters,to transmit data and voice signals. Radio wireless technology can also provide high-precision location tracking and secure digital keys for automotive and smart home devices.

What are the emerging technologies in LR wireless communications?
Emerging technologies in LR wireless communications include fiber optics,which are not wired communications although cables are run,the medium utilized in fiber optics is light. Infrared devices are also used as wireless technology.

What Are Radio Links Without Infrastructure? Radio links without infrastructure refer to wireless communication systems that establish direct connections between devices or ...

This article proposes a system based on a long-distance communications system with low economic and energy costs that allows connectivity to be carried out independently ...

Mobile Mobile Mobile Base Station Stationary Mobile Mobile --> TDMA, FDMA, CDMA, polling --> contention-based multiple access w/o priority Cellular telephony: frequency ...

I''m currently working on a project that involves establishing a reliable non-line-of-sight wireless communication link with a range of 1 kilometer or more. The project does not ...

15-4 Describe the types, basic components and functions of a satellite communication system. 15-5 Compare the factors that affect long-range ...

LoRaWAN is a low-power, low-cost wireless technology that can enable secure, highly reliable communications to smart buildings, smart cities, smart agriculture, and more.

ELTRES is a new LPWA (Low Power Wide Area) wireless communication standard suitable for IoT networks. By taking advantage ...

Features of LoRa As a wireless technology, LoRa operates in the Sub-GHz frequency band, enabling long-distance communication with low power consumption, making it ...

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ELTRES is a new LPWA (Low Power Wide Area) wireless communication standard suitable for IoT networks. By taking advantage of the three major features of robust long ...

Communication infrastructure is vital for the activities in an area. However, off-grid is still common in many rural areas, which results in a significant gap from the outside of the ...

15-4 Describe the types, basic components and functions of a satellite communication system. 15-5 Compare the factors that affect long-range wireless performance, such as frequency, ...

LoRa wireless technology is revolutionizing long-distance wireless data transmission with its unparalleled ability to connect devices over vast distances while maintaining low power ...

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