ufiSpace

Private LTE Vs Wi-Fi

The decision between Wi-Fi and private LTE solutions isn't a simple **black-and-white choice.**

Explore the key differences to make the right choices.

USER CASE

stands out for its suitability in industrial automation and supporting critical applications like warehouses, factories, retail stores, and airports.

well-suited for day-to-day enterprise connectivity or general-purpose environments, catering to needs such as employee connectivity and guest access.

ARCHITECTURE

Utilizes small cells to form a Radio Access Network (RAN) provides superior coverage and performance, but with increased complexity in installation and management.

Characterized by a straightforward setup involving access points and routers, offering basic wireless access with simpler deployment.

BANDWIDTH

Typically supports bandwidth ranging from 100Mbps to 1Gbps, suitable for many applications.

Wi-Fi 6, the most common technology, theoretically supports up to 10Gbps bandwidth.

COVERAGE

Offers better coverage with radio covering 4x more than typical indoor Wi-Fi AP, despite slower bandwidth.

Open, shared, unlicensed spectrum may lead to congestion and signal interference.

INTERFERENCE

Centralized spectrum management reduces interference between networks.

Legends may have historical roots or be associated with specific places and times, even if elements are exaggerated or fictionalised.

LATENCY

Centralized spectrum management reduces interference between networks.

Wi-Fi 6 can achieve latency as low as 20ms, comparable to Private LTE.

SECURITY

Requires authorized SIM card for network access, providing a higher level of protection against unauthorized access.

May lack stringent authentication or encryption, potentially making it more vulnerable to security breaches.

SPECTRUM

Operates on licensed spectrum, guaranteeing exclusive access but incurring a cost.

Utilizes free, unlicensed spectrum, offering cost-effective deployment but risking interference due to shared access.

Open networking enables cost-effective, future-proof wireless infrastructures, driving digital transformation and growth for enterprises.