

Ericsson Private 5G

A private network as dedicated as you
are



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To reach new levels of efficiency, commercial and industrial enterprises are increasing automation and data use, finding new ways to improve workplace safety, and investing in seamless connectivity to meet business expectations. Existing technologies such as Wi-Fi often fall short due to technical limitations, cost, and complexity. With Ericsson Private 5G, these challenges are met by leveraging Ericsson's best-in-class radio portfolio, management software, and services — all bundled with flexible subscription packages, management options, and add-on features.

Solution overview

Ericsson Private 5G is Ericsson's next-generation private network solution, providing secure and reliable 4G and 5G connectivity through its single server dual mode core. Built for business-critical operations, the solution comes pre-integrated to ensure rapid time to service, delivering advanced and intelligent operations in any environment, all while keeping sensitive data secured on site.

Solution benefits

- Ericsson's radio portfolio offers industries best performance capabilities including coverage, mobility, and latency that scale for any deployment size
- High-value features such as precise indoor positioning (available soon) drive business outcomes saving time and money
- Managed Operations including SLAs available Ericsson will proactively manage networks and guaranteeing up to 99.95% uptime



Key Use Cases

Digitalization

Leverage wireless sensors, cameras and drones to feed digital models and AI analytics, driving data-driven decision making.

Automation

Full integrate industrial control, automation and remote control system throughout the production process to enhance efficiency.

Connected Assets & workforce

Enhance worker capabilities with immersive technologies like extended reality (XR), location awareness for safety and seamless machine interaction.



Digital twin



Sensors



Computer vision



Asset management



Robotic control



Automated logistics



Drones



Remote control



Augmented workers







Push-to-talk (PPT)

Competing Technologies

	Private 5G	Wi-Fi
Reliability	Private 5G offers more reliable and predictable low latency compared to Wi-Fi, particularly in environments where interference, mobility, and high device density are concerns. Designed for low latency with features like network slicing, which allows for dedicated network resources for specific applications.	Wi-Fi cannot match the low latency capabilities of a well-optimized private 5G network, particularly in congested environments.
Coverage	Indoor Radio Dots transmit power at 1.6-3.2 Watts. Outdoor radios transmit power up to 100's of Watts for massive coverage areas like CSP networks.	Access point transmit power is limited to 1 Watt. Poor coverage necessitates large number of APs.
Mobility	Deterministic cellular networks optimize for client signal strength and enables seamless handovers.	Roaming handovers determined by client, leading to 'stickiness', dropped connections, and inconsistent latency.
Security	5G architecture leverages robust encryption and advanced SIM-based mutual authentication to ensure stricter control over network access.	Relies on weaker password-based protection and is more vulnerable to man-in-the-middle attacks, making it easier for unauthorized users to access the network.

Ericsson Radio Portfolio

	 Radio dot	 Micro radio	 Macro radio	 AIR
Environment	Indoor	Indoor/Outdoor	Outdoor	Outdoor
Max speed	3.8 Gbps	10 Gbps	25 Gbps	25.8 Gbps
Max bandwidth	200 MHz	150 MHz	380 MHz	300 MHz
MIMO	2x2, 4x4	2x2, 4x4	4x4, 8x8	Up to 32x32
Key functionality	Scalable, Flexible, indoor positioning	Versatile high performance small cell	High capacity, wide area outdoor coverage	Beamforming, massive MIMO

