

Celona Private Cellular Networks for Digi Solutions

Manufacturing Applications



Restrictions Revoking Reliability

Factory operations can be significantly slowed due to lack of reliable coverage during busy periods degrading performance, while wired connectivity for PLC and other equipment restricts manufacturing agility, all holding significant costs, hence the need for Private 5G.

Use Cases for Private 5G in Manufacturing



✔ Reduce equipment downtime

IoT/machine connectivity for predictive maintenance

- Reliability, low latency
- Hard to reach places

✔ Cutting cord agile manufacturing

Wireless PLC connectivity

- High reliability
- Low latency (<100 msec)
- Later 2 connectivity

✔ Automation with mobile robotic fork-lift operators

AMR/AGV automation

- Pervasive connectivity
- Reliable hand-offs (mobility)
- Low latency

Benefits of Private Wireless in Manufacturing

Attribute	Public Cellular	Private Cellular	Enterprise Wi-Fi	Proprietary LPWAN
Privacy	●	●	●	●
Security	●	●	●	●
Capacity	●	●	●	●
QoS	●	●	●	●
Latency	●	●	●	●
Resiliency	●	●	●	●
Mobility	●	●	●	●
Device Ecosystem	●	●	●	●
Cost	●	●	●	●

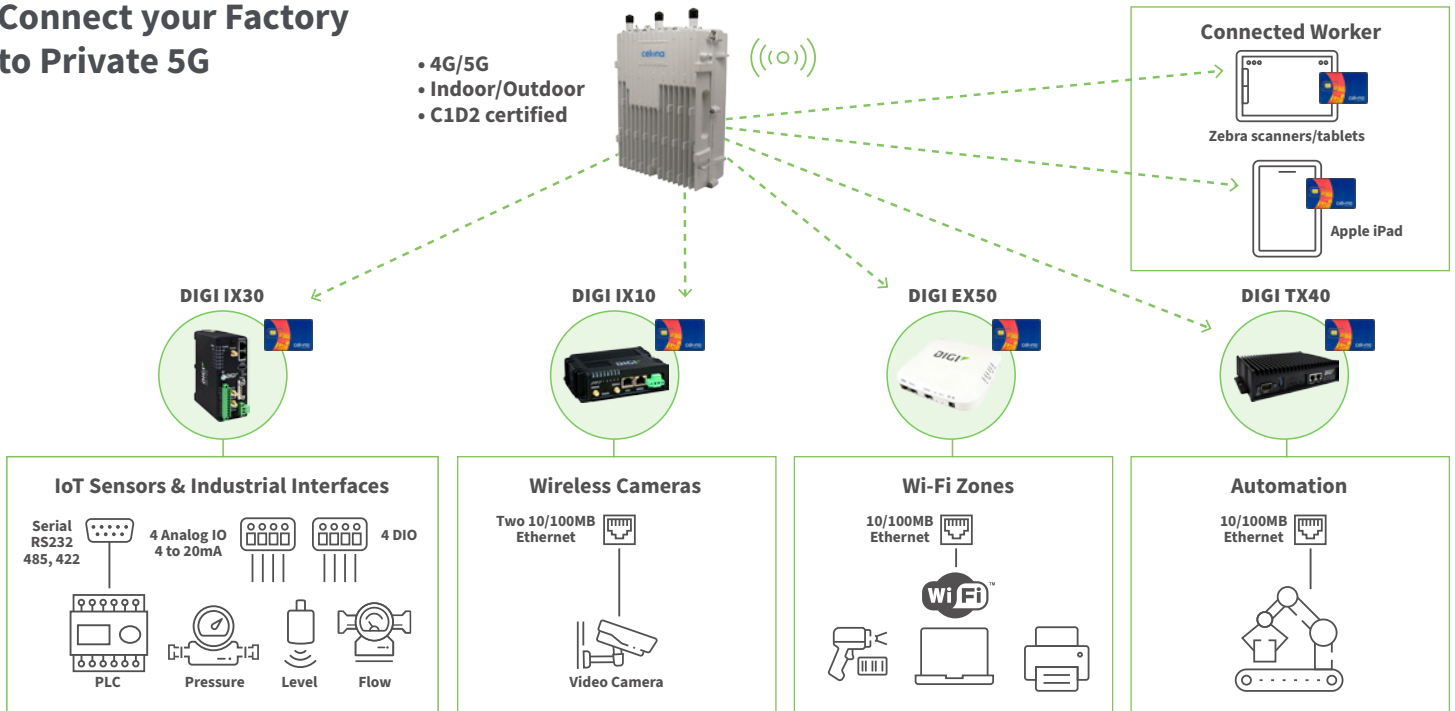
Improve Operational Efficiency using Private 5G Wireless in Manufacturing



Private Wireless for the Connected Worker

Private Wireless is an LTE/5G network stood up by the enterprise to exclusively cater to its wireless needs. In the U.S., most private cellular networks use the CBRS (Citizens Broadband Radio Service) band, whereas worldwide other bands like n77, n78, n79 are being used.

Connect your Factory to Private 5G



✓ Coverage

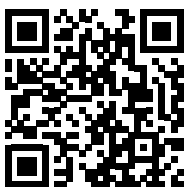
- Connect to IoT sensors and machinery anywhere in the plant with a fraction of cost Wi-Fi infrastructure
- Setup Wi-Fi zones on Private 5G backhaul anywhere on campus

✓ Latency

- Less than 30 msec round trip latency and managed QoS for real-time sensors, video analytics and more

✓ Mobility

- Reliable handovers for AGV, AMRs and mobile automation



Reach out today to learn more about 5G Private Networks and collaborative solutions with Digi