



Smart Robotics Solution Brief

Executive Summary

To be competitive, logistics companies and manufacturers must navigate labor shortage challenges and manage inflation costs while improving overall equipment efficiency and maintaining a safe working environment. And like other mission-critical industries, they are facing ever-present cyber threats that dictate a proactive cybersecurity strategy.

There is a growing recognition that automation provides a significant solution to these challenges. Innovative technologies can drive down costs, increase productivity, and improve quality, safety, and security. Yet modern robotics can't be deployed without robust connectivity.

Private Wireless for Smart Robotics

Anyone who has deployed an enterprise Wi-Fi network knows that Wi-Fi struggles when latency, mobility, coverage, and security are required. For business-critical applications, Wi-Fi is not the best solution. Today private wireless networks are emerging as the enabler of advanced manufacturing and warehouse automation.

The private wireless network can be set up exclusively within each enterprise, behind their private firewall, keeping access to the network and all their data secure. Parts of the network can be outdoors, but the network is specific to the enterprise. Bandwidth and latency issues are minimized without any external interference. Private 4G/5G networks leverage the advantages of wireless technology but in a controlled and secure environment that assures high reliability and low costs.

While private 5G networks will become essential for autonomous vehicles and sophisticated virtual reality applications, private 4G solutions can provide optimal value and performance for most of today's business-critical manufacturing and warehousing applications. According to ABI Research, private 4G can support 85% of automation use cases in industrial manufacturing, offering the advantage of a large, well tested, and robust ecosystem for smartphones, tablets, laptops, cameras, and IoT devices.

Betacom Offers a Turnkey Private Wireless Service

Betacom 5G as a Service (5GaaS) is a turnkey managed service that provides organizations with a 4G/5G private wireless network to run critical automated business applications that cannot fail. It offers best-of-breed security, coverage, and high-bandwidth, low-latency performance. Betacom plans, designs, installs, and operates the network with proactive network and security monitoring. Importantly, all data is managed on-premises and is owned and controlled by the enterprise, behind their firewall. With Betacom 5GaaS, since the business owns their own data, there is no need to worry about variable rate data plans.

Benefits of a Betacom Powered Smart Robotics Solution

Private wireless deployed through your robotics partner has the potential to radically change the manufacturing and warehousing industries by increasing productivity through automation. When deployed together, the solution offers three key benefits:

- **Increase Revenue:** Improve productivity with a high-speed private connection and unlimited data usage.
- **Ensure Safety:** Safely deploy robotics with a network that provides reliable connectivity. Always.
- **Turnkey Managed Service:** A dedicated team of Betacom engineers will work with you and your robotics partner to deliver end-to-end service with performance guarantees.

The Betacom 5GaaS managed solution allows enterprises to control the performance criteria, the data, and the network as a whole – while Betacom manages the network with full visibility and support.