

# ENSURING SYNERGY IN WAREHOUSE AUTOMATION WITH 5G

## HIGHLIGHTS

- ✔ Automating the work processes in warehouses is the way of the future. But this isn't easy to make a reality when warehouses are located far away from good network signal and their packaging lines depend on ultra-fast data transmission for smooth operating.
- ✔ RUTX50 is our first-ever router equipped with 5G technology, making ultra-fast and real-time data transmission possible. It guarantees ultra-low latency and Internet speeds of up to 3.3 Gbps per port as well as dual-band Wi-Fi support.
- ✔ This 5G router also has advanced security features built into its operating system and is compatible with our Remote Management System (RMS), which ensures easy monitoring capabilities for the entire solution.

## THE CHALLENGE – CONFRONTING SPEED AND LOCATION

The future of warehouses is very bright, as their demand is estimated to increase by 7% (CAGR) by the end of 2024, valued at more than \$300 million. With such prospects, they must function flawlessly. But how can this be ensured?

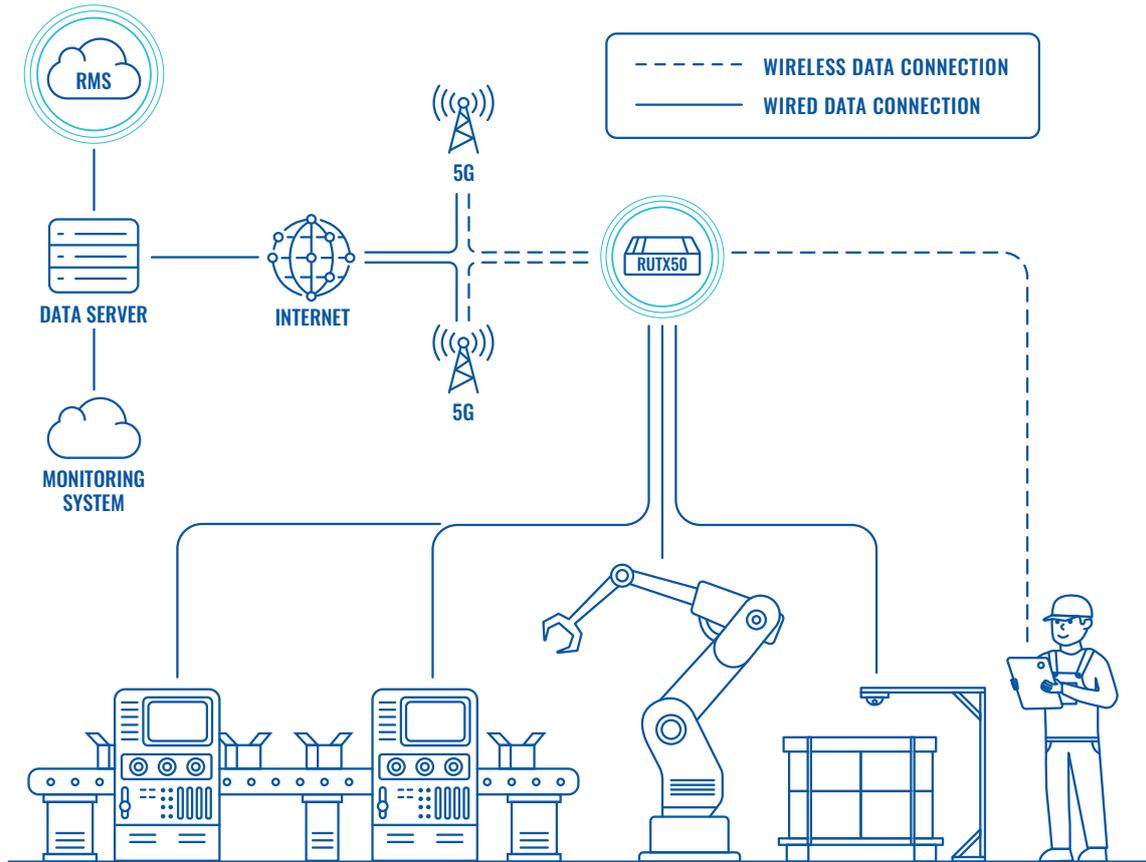
Ensuring smooth operating processes is difficult in warehouses, since there's so much going on at all times. Besides fast-paced requiring tasks, like inventory calculations, the packaging factory lines is the most challenging part of the warehouse that can quickly fall apart if working performance isn't flawless.

However, with so many tasks happening all at once, it's hard to achieve that top-notch efficiency – especially with human labor and suboptimal network connectivity. Together, these result in lower productivity and accuracy. Hence, optimizing the warehouse with seamless automation and superb network connectivity is the best choice for ensuring successful warehouse functioning.

But there's one issue – the warehouse's location.

These facilities are usually located in the outskirts of urban areas where network connectivity signals aren't the best, so solutions like wired connectivity or increased amount of networking devices can get costly, challenging to keep up with, and have potential security vulnerabilities. But what if we told you that this problem could be solved in no time using a single device capable of easily providing an entire warehouse with lightning-speed and accelerated data throughput?

## TOPOLOGY



## THE SOLUTION – OPTIMIZATION WITH AUTOMATION

When it comes to robust network connectivity demand and continuous, real-time data throughput in rural areas, investing in cutting-edge technology is the most rational choice. That’s right – we’re talking about 5G!

The RUTX50 is our first 5G-supporting cellular router designed to tackle all these concerns in a flash. With this router, the location issue is removed immediately. Wirelessly connected to cell towers, the RUTX50 manages to transmit network connectivity through dual-band Wi-Fi and 5 Gigabit Ethernet ports, so all machines and monitoring devices in each warehouse receive robust Internet connectivity.

What about speed and latency? Well, this is where the real fun begins.

Because 5G was invented with IIoT in mind, RUTX50’s data throughput speed and latency are immaculate compared to previous network technologies. It reaches up to 3.3 Gbps and ensures that all data is transmitted with a latency as low as single-digit milliseconds. This is especially important for the packaging factory line, where machines depend on uninterrupted synergy. If one breaks, RUTX50 immediately alerts monitoring systems about the situation and stops the entire line until the error is fixed.

Due to 5G technology’s adaptive modulation and different coding schemes, its error rate is extremely low while its range is wider than ever before. In addition, all data within the RUTX50 network is completely protected, as the device comes with our RutOS operating system’s advanced security features and compatibility with our RMS. This way, automation can function efficiently, securely, and flawlessly.

Automated working processes powered by 5G can provide a level of efficiency never seen before. And with our RUTX50 router, that level becomes a reality.

