wavetel

Wavetel 5G Router WR575 in Smart Factory Automation

Overview

In Industry 4.0, **real-time data connectivity** is essential for smart manufacturing. The **Wavetel WR575 5G Router** provides **high-speed, reliable networking** for factory equipment, enabling seamless communication between machines, sensors, and remote management platforms.
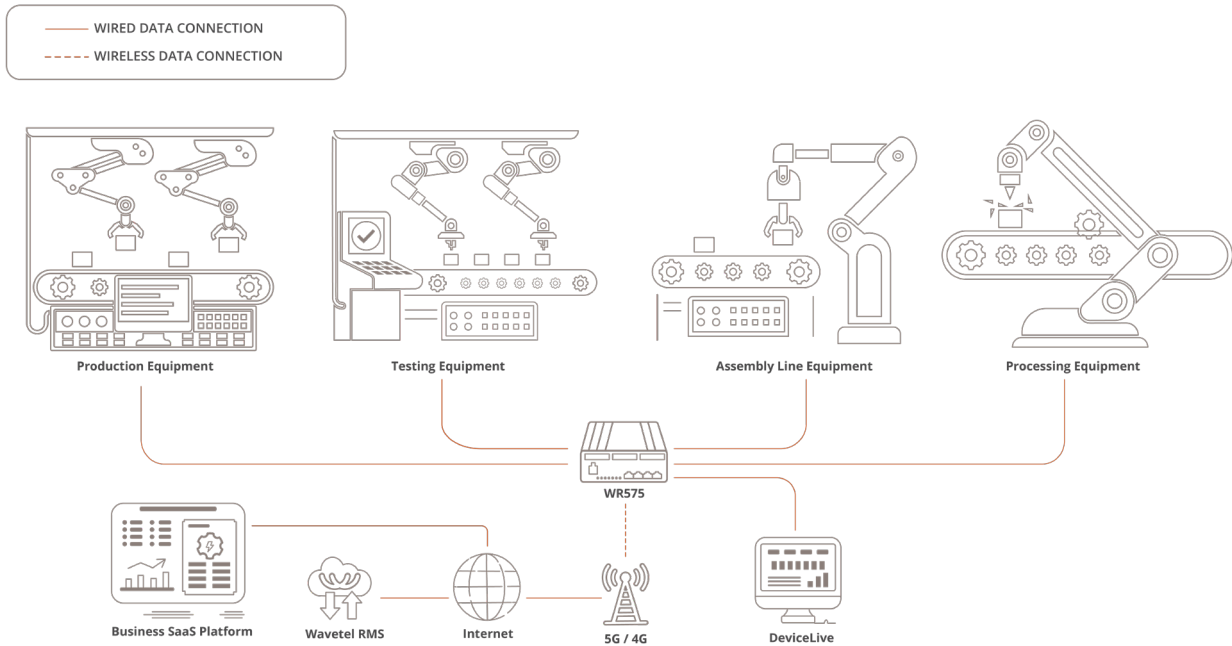
Challenge

- Factories require **ultra-low latency** and **high-bandwidth** connectivity for real-time control.
- Traditional wired networks are **inflexible** for dynamic production lines.
- **Network failures** can halt production, causing costly downtime.
- Legacy **serial/I/O devices** need integration with modern IP-based systems.

Solution

The **WR575 5G Router** delivers:

- ✓ **5G + Wi-Fi 6 Connectivity** – Gigabit speeds for real-time data transfer.
- ✓ **Multi-Interface Support** – Connects via **Ethernet, Wi-Fi 6, RS232/485, and I/O ports.**
- ✓ **Dual-SIM Failover** – Auto-switches to a backup carrier if the primary 5G fails.
- ✓ **Multi-VLAN Segmentation** – Isolates MES, PLCs, and IoT devices for security.
- ✓ **Remote Management** – Cloud-based monitoring & firmware updates.

Topology

WIRED DATA CONNECTION
WIRELESS DATA CONNECTION

Production Equipment · Testing Equipment · Assembly Line Equipment · Processing Equipment

WR575

Business SaaS Platform · Wavetel RMS · Internet · 5G / 4G · DeviceLive

Benefit

- **Zero Downtime** – Dual-SIM redundancy ensures 24/7 operations.
- **Future-Proof** – 5G & Wi-Fi 6 support high-density IoT deployments.
- **Cost-Efficient** – Eliminates expensive cabling; wireless flexibility.
- **Enhanced Security** – VLANs & firewall policies protect critical data.

Implementation

1. **Deploy WR575 routers** across production lines, connecting machines via Ethernet/Wi-Fi/serial ports.
2. **Configure Multi-VLANs** to separate MES, quality control, and logistics traffic.
3. **Enable 5G Dual-SIM** for automatic failover if the primary network drops.
4. **Integrate with Cloud Platform** for remote monitoring & predictive maintenance.

Why Wavetel?

- **Industrial-Grade Reliability –** Designed for harsh factory environments.
- **Seamless Legacy Integration –** Supports serial & I/O devices.
- **Proven in Smart Factories –** Deployed in automotive, electronics, and heavy industries.
- **End-to-End Support –** From deployment to remote troubleshooting.