AI POWERED CABLE DRUM STORAGE MANAGEMENT

SUMMARY

Cable drum storage is challenging for many reasons. Besides their large size, they have other important requirements, like always being kept in a vertical position or never placing any weights on the drums. This means that the space requirements for the storage areas of these units are huge and this makes the tracking process quite difficult. Inefficient tracking systems on-site cause companies significant losses related to delayed logistics, poor inventory management, and theft.

CHALLENGE

Due to the large size of the storage yards, without an efficient tracking system in place, it is impossible to gain full visibility and efficiently manage both human and stock resources. This results in extended order processing time, decreased inventory turnover, and high labor costs due to inefficient exploitation of the workforce. However, large infrastructure changes are usually unattractive to the owners of such entities due to the high costs and time required for implementation.

PARTNER - ViLOG

ViLOG is an AI-powered cloud-based yard logistics management solution that tracks assets with zero required set-up. Leveraging the latest cloud, AI, and IoT technologies the system significantly increases inventory turnover, reduces costs, and is extremely easy to deploy and operate.

SOLUTION

Our partner ViLOG came up with a solution, which enables maximizing the efficiency of storage yards without deploying complex hardware infrastructure or compromising performance. It only requires adding four simple components to the already existing infrastructure on site:
• BLE beacons to be coupled with asset identifiers;
• Teltonika Networks RUTX11 LTE Cat 6 cellular router;
• ViLOG App to be used by yard operators on their mobile phones for continuous real-time data collection from the assets and employees on-site;
• ViLOG Cloud for data storage and AI-powered positioning and insights for automation and optimization purposes.
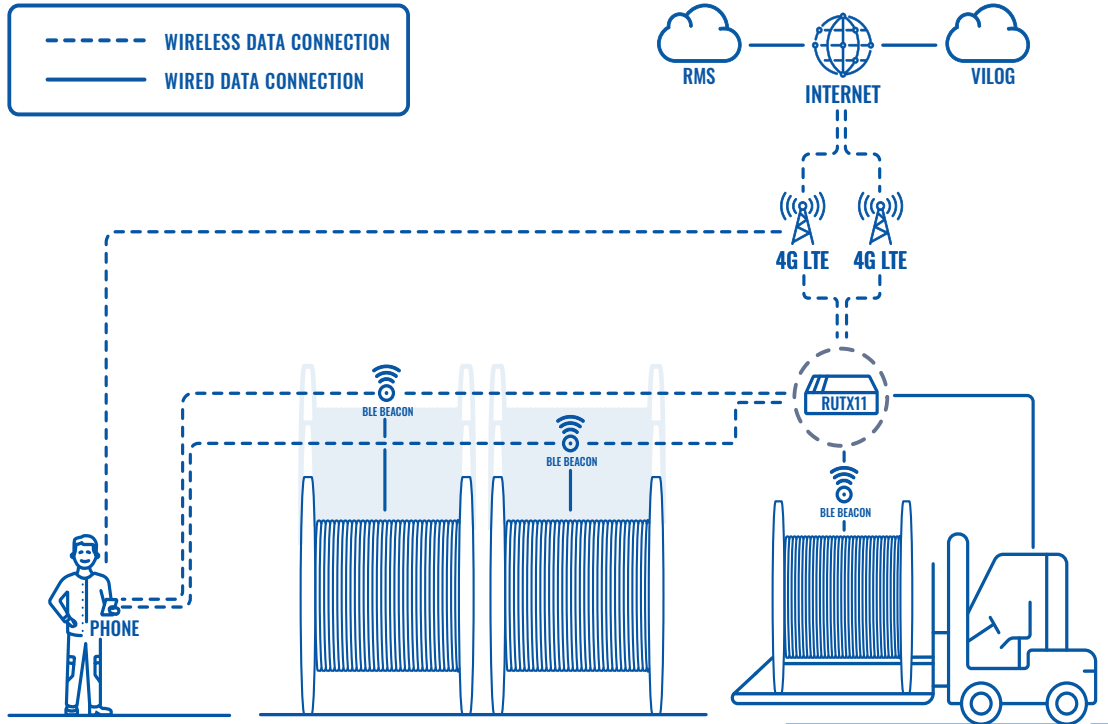
In this solution, there is a BLE beacon added to every drum stored in the yard. This allows to connect them to the same network and easily find each of them via a mobile ViLOG app installed on employees' phones. This way it is a matter of seconds to find the right cable drum in the large yard and utilize the space efficiently by storing another one in its' place.

The RUTX11 router with dual SIM and auto-failover was a perfect choice to ensure uninterrupted connectivity for this solution. It collects data from every BLE beacon and securely sends it to the ViLOG Cloud. At the same time, it provides connectivity to the mobile phones on site. Whenever there is a problem with the primary network, the router automatically switches to the second operator through another SIM to ensure a smooth transition of the data.

BENEFITS

• Hassle-free implementation - few components and no requirements for special training will not require high monetary and time expenses.
• Optimized yard management operations - all routine procedures are simplified and fully automated, helping to avoid human errors. RUTX11 with dual-SIM and auto-failover ensures these processes are never interrupted due to connectivity issues.
• Easily scalable - the size of the yard will only determine how many BLE beacons and routers should be deployed on-site.
• Fully remotely managed - see real-time data, analytics and create custom dashboards and alerts using Teltonika Networks Remote Management System.

WHY TELTONIKA NETWORKS?

ViLOG commented on why they chose Teltonika Networks: "Teltonika Networks provide quick-to-deploy and easy-to-use devices. Hardware is free from being locked into a specific Internet Service Provider and delivers an optimal price-quality ratio. Teltonika Networks' wide portfolio of products enables covering virtually every use case possible."