



# EMPOWERING FLOOR SCRUBBER MACHINES WITH A CELLULAR ROUTER

## HIGHLIGHTS

- ✔ [Cleanfix Reinigungssysteme AG](#), a cleaning equipment manufacturer from Switzerland, has been developing and producing its own cleaning robots for professional use, establishing itself as a pioneer in this emerging market.
- ✔ The company's scrubber-dryer robot, primarily used in industrial settings such as warehouses, necessitates a networking solution to guarantee continuous connectivity for remote management, control, and data transmission between the machines and its custom mission control app.
- ✔ With a flexible approach to network infrastructure, the RUT956 cellular router is a wonderful choice for such a challenge. With multiple WAN interfaces, failover functionality, and robust network support, this LTE router empowers floor scrubber machines to perform effortlessly.

## THE CHALLENGE – MAKING INVISIBLE WORK GET DONE

We often talk about industrial premises like logistics warehouses, where an emphasis is placed on the high-efficiency performance of each equipment. Surely, ensuring this makes a solution work like a charm. Yet, we tend to overlook this charm's invisible work – the maintenance of these premises.

Cleanliness in industrial settings is just as important for safety and efficiency, as it reduces risks of slipping or tripping for workers and equipment like forklifts. A solution to that is, well... by cleaning the premises.

While manual cleaning can be a viable choice, automating this process proves more cost-efficient and precise. Given that machinery can access areas where human labour might find it challenging or hazardous to reach nooks and crannies, industrial cleaning machines accomplish this task with ease.

So, it's not about having someone, but rather something to clean the premises.

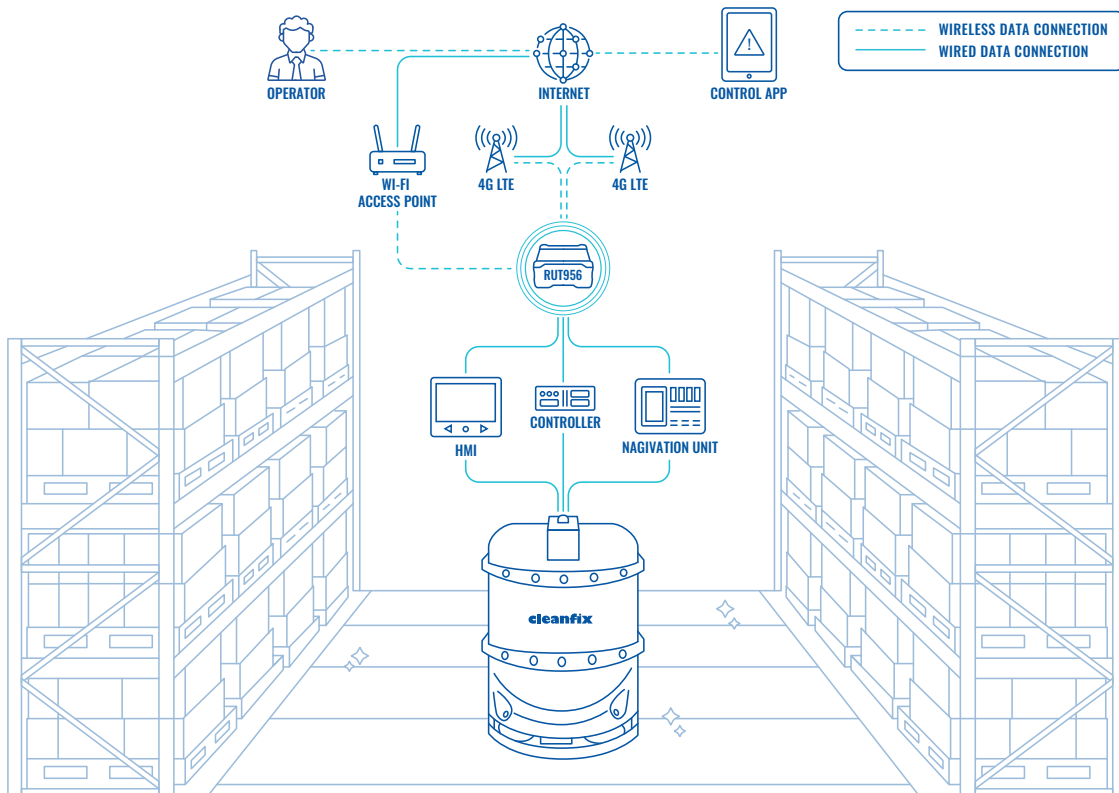
Industrial cleaning robots, such as floor scrubber machines, offer an excellent alternative to manual cleaning. They perform this monotonous task at night, avoiding disruptions to work processes during the day. However, the effectiveness of these robots hinges on reliable network infrastructure and connectivity.

One of the key reasons for that is the need for uninterrupted data transmission. Industrial cleaning robots are controlled remotely via a mission control app, and since they're employed in warehouses often located in rural areas in multiple countries, a robust network signal for sending commands and remote management is a must.

Not only that, but communication must be ensured both ways, as cleaning robots must send data to the mission control app about cleaning reports and their exact location in the warehouse in real time.

The lingering question remains: what element can make such an automation possible?

## TOPOLOGY



## THE SOLUTION – INVISIBLE WORK STAYS INVISIBLE

Our client, Cleanfix Reinigungssysteme AG, chose the Teltonika Networks RUT956 cellular router to overcome these challenges for their floor scrubber machines. And it's your best bet that this LTE router facilitates a seamless operation for the client's networking solution, acting as the intermediary between each floor scrubber machine and remote commands travelling straight via an app!

Connected to the scrubber-dryer machine's controller and navigation unit via Ethernet ports, our cellular router can display the robot's status over cleaning agents and water levels as well as battery percentage over the robot's HMI or via the mission control app. This ensures that personnel who take care of each floor scrubber machine have all the necessary information about the robots' components to clean premises efficiently.

The RUT956 cellular router has 2 SIM card slots, multiple WAN interfaces, and a failover feature. By setting Wi-Fi connectivity as the primary Internet source and mobile connectivity as secondary, the failover can automatically switch from one another when connectivity from a higher priority WAN interface experiences downtime.

If there's a need to further advance uninterrupted connectivity, a second LTE mobile card can be inserted in the RUT956 cellular router and set to be a tertiary Internet source. This can additionally ensure a flexible network infrastructure and uninterrupted connectivity for each scrubber-dryer machine.

This failover router is crucial for data transmission between the machine scrubber and mission control app to ensure commands from the app are ordered and reports from the robot are sent out at any time. Importantly, since the RUT956 cellular router is certified to be used globally, it can be deployed in any part of the world's warehouse, increasing the scalability and convenience of this networking solution.

