



AUTONOMOUS DELIVERY ROBOTS ENHANCE SAFETY AND PRODUCTIVITY

SUMMARY

The dramatic growth of globalization over the last decades has led to equally dramatic growth in healthcare, hospitality, and office businesses and facilities. For example, according to the World Travel and Tourism Council (WTTC), hospitality now drives around one-tenth of the world's total GDP. However, recent times have not been easy in these sectors. For example, COVID-19 pandemic led business leaders to look for new improved and safer ways to provide their services. Companies are now considering new and creative solutions to not only comply with distancing requirements but also attract customers, guests, and patients to visit and feel safe in their businesses.

CHALLENGE

Our partner Savioke has introduced an innovative product to help the staff, be they guest service in hotels, nurses in hospitals, or logistics personnel in large offices, to handle delivery tasks. The Relay robot, while being able to fulfill the job quickly, reliably, and especially importantly – safely – also remarkably improves the guest experience and productivity of the personnel, as now they may save time for more important assignments.

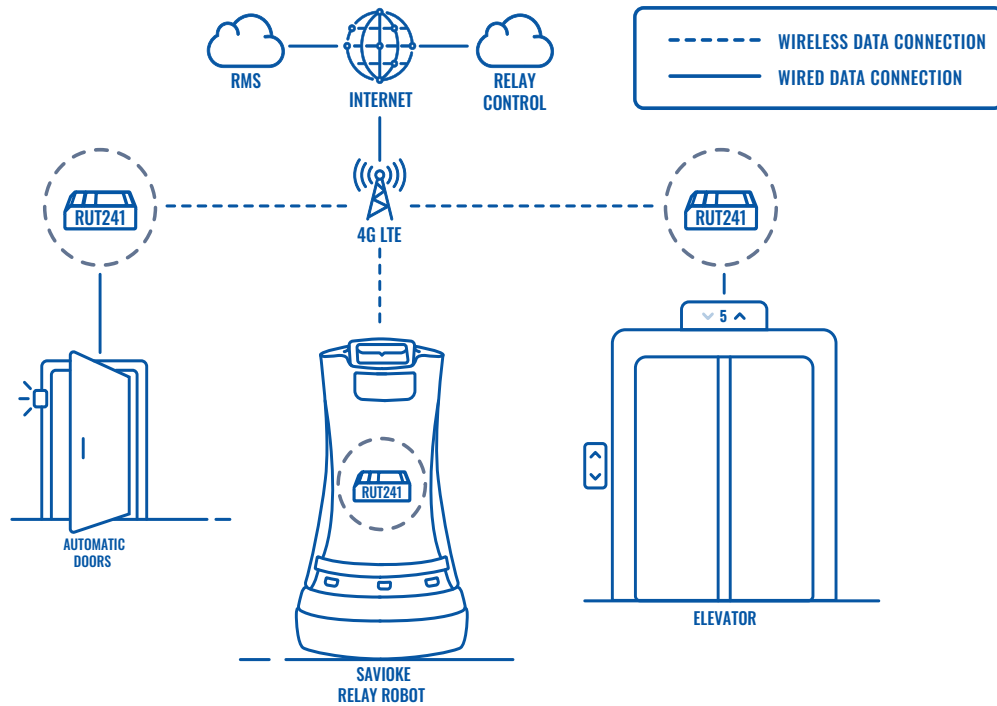
The robot is unique in its ability to operate in crowded public environments in hotels, hospitals, or enterprise facilities, safely navigating across their large and complex footprints. Relay robot must seamlessly operate across the floor plans, call and ride elevators, and pass through automatic doors - all without human input.

To accomplish such challenging navigation, we worked together to find which of Teltonika Networks products fits best to help the robot communicate with the Relay Control center and various controllers in the building.

PARTNER - savioke

Savioke's mission is to measurably improve people's lives by creating and deploying innovative, helpful, and friendly delivery robots that work safely and reliably in dynamic public environments. Savioke was founded in 2013 by a team of leading robotics innovators from the ground-breaking research incubator Willow Garage and is staffed with some of the best and brightest engineers, designers, and business people in Silicon Valley, if not the world. As a global company, Savioke has employees, partners, and customers throughout the world.

TOPOLOGY



SOLUTION

Savioke’s project required a router, that is small in size, has a reliable LTE connection, and certifications. The robot works 24/7 and needs to be reachable any time, so any random shutting down or restarting would not be acceptable and cause a lot of problems. The Teltonika Networks RUT241 router proved to be the perfect fit as it is compact but powerful, has over 20 various certifications and approvals, and offers advanced security features for mission-critical IoT.

As Savioke Relay robot autonomously navigates through doors or uses an elevator, a specific set of commands are transmitted to the router connected to the Cloud (e.g. “Relay approaching – open door”), which in turn signals for a particular action to take place. Relay robot and Savioke’s on-site system use 4G LTE RUT241 router to communicate with one another. This smooth and seamless interaction enables Relay to proceed with its travels and complete its assignments successfully.

BENEFITS

- Compact size – RUT241 measurements (83 x 74 x 25) are minimal compared to other products with similar capabilities, so it fits into solutions that are limited by space requirements.
- Certification – this model has the broadest variety of internationally recognized certificates of all Teltonika Networks routers.
- Connection stability – RUT241 cellular router offers a stable LTE Cat 4 connectivity and Ethernet port.
- Customizability for internal applications – no need to change existing programs saves the implementation costs and time.
- Excellent support – live communication with Teltonika Networks engineers allowed to find the best possible solution and reach set goals.

WHY TELTONIKA?

Teltonika Networks offered the full package: not just the product itself but also all the necessary support along the way. The RUT241 router provided the right balance of international certifications, stable LTE connectivity and was easily customized for Savioke’s in-house applications.

