
# THE LIFE-SAVING INSPECTOR ROBOT

## HIGHLIGHTS

Robotnik

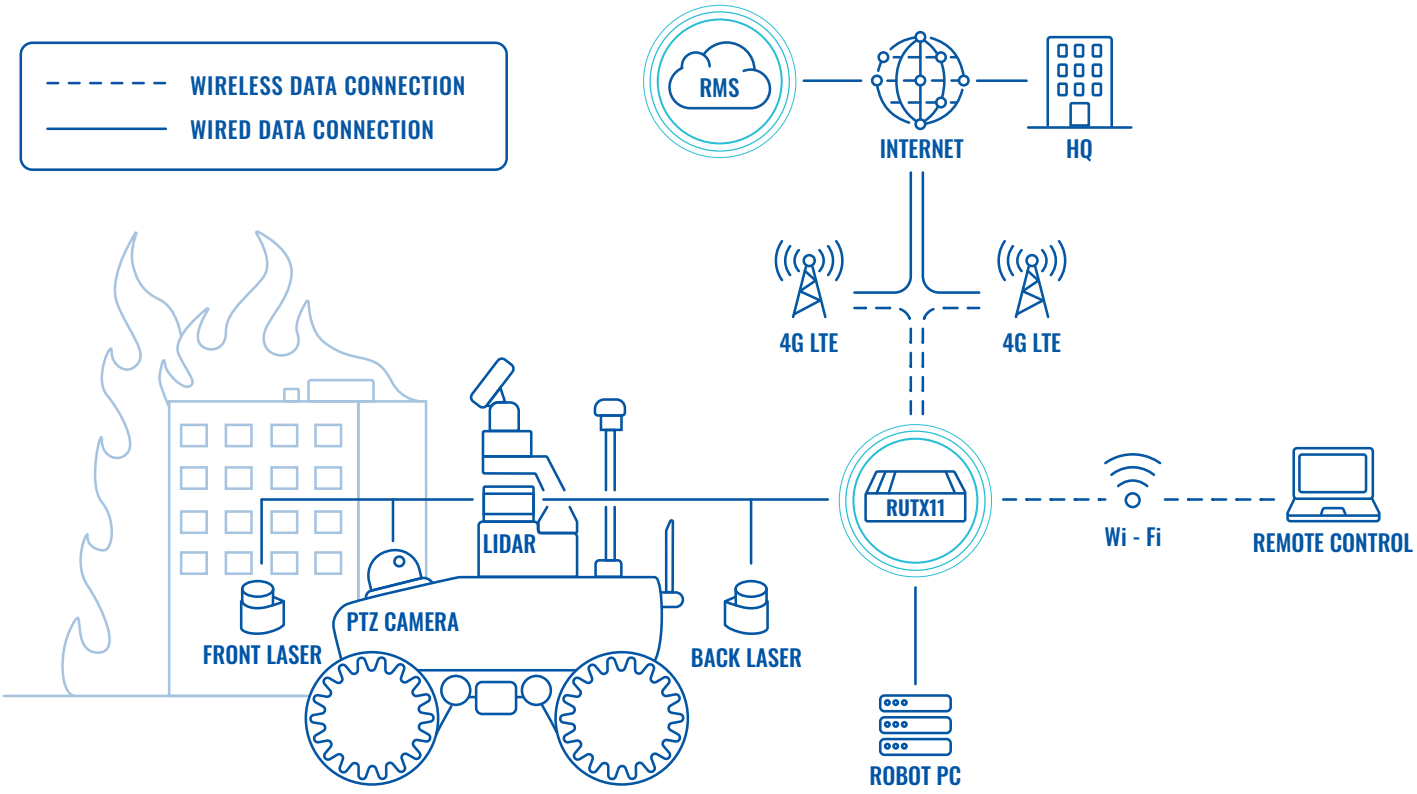
- Robotnik Automation is a Spanish designer and manufacturer of mobile robots and manipulators that perform monotonous work autonomously or complex work controlled by a remote operator.
- Its inspector robot must maintain strong connectivity in unstable, hazardous environments, such as when a fire breaks out or when toxic gases are present.
- RUTX11 was selected for the robot on behalf of its LTE Cat 6 internet, wide range of I/Os, multiple failover features, and an exceptionally sturdy design.

## THE CHALLENGE – CONNECTIVITY IN THE FACE OF DANGER

A fire breaks out in a residential area. A suspicious bag is left in a public space, suspected to be a bomb. Toxic fumes engulf a workspace as a result of an accident. All of these scenarios, and more like them, routinely and unpredictably call for first responders and inspectors to risk their lives by venturing into the danger to resolve the situation and save the lives of others.

Robotnik's SUMMIT-XL mobile robot was designed to go into the danger first, survey the area, and help first responders plan accordingly, thereby reducing the risk they bravely take on. Multiple pieces of built-in equipment help it on its missions, but to ensure mission success, its connectivity must remain steadfast in the face of the environmental hazards present in these situations. Such hazards range from dangerous temperatures and chemicals to debris and collapsing infrastructure, and quite a bit in between.

# TOPOLOGY




# THE SOLUTION – CALL IN A PROFESSIONAL

With great responsibility comes the need for great connectivity power, and our RUTX11 was the right device for the mission. Connected to SUMMIT-XL's PC via USB, this industrial cellular empowers this robot with a robust LTE Cat 6 connection with a static IP.

Designed with adverse conditions in mind, RUTX11 withstands vibrations, moisture, and temperatures ranging from -40C to 75C and can take potential hits from collapsing infrastructure. And when things get tough, multiple reliability measures, including dual SIM cards with auto-failover, backup WAN, and switching scenarios, ensure the network's stability.

In addition, its wide range of I/Os and compatibility with a myriad of protocols, including MQTT, Modbus TCP, BGP, and GRE, allow SUMMIT-XL to be further customized with upgrades for specialized tasks without having to make any changes to its connectivity setup.

RUTX11 acts as a stable data bridge between the robot's PC and equipment and the control center operating it behind the scenes. Thanks to its robust connectivity, inspectors can enter the scene with a better-informed plan of action and are all the safer for it as a result.