

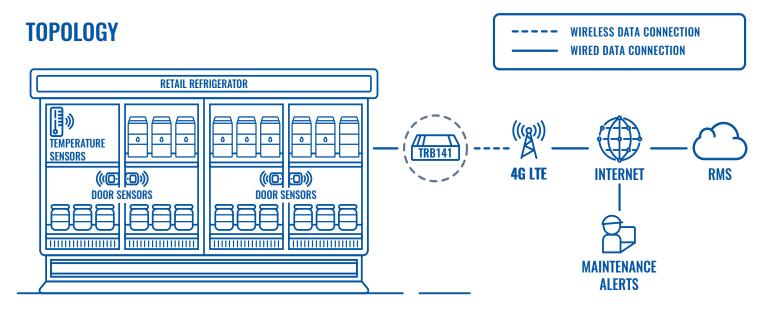
### **SUMMARY**

Food safety is a universally important issue. Contaminated food can cause various diseases if not death in some cases, hence handling and storage of food is strictly controlled and supervised. World Health Organization provides five core keys to safe food management, and one of them is storing at suitable temperatures. This helps to prevent microorganisms from multiplying and eliminates the possibility of food poisoning if the other safety measures are taken responsively.

# **CHALLENGE**

In retail and logistics, responsibility related to food waste in case of technical failures often falls on the manufacturer or integrator of the system. The biggest challenge is that without remote 24/7 monitoring, it is difficult to notice minor problems before they cause real damage. Early detection could usually prevent high losses, but that is difficult to achieve if the refrigerator is stored in a third-party establishment, and is only managed by the employees. It also usually means that the systems are left unsupervised outside of the working hours, so such a simple issue like a door left open could cost thousands of euros in spoilage and lost sales. Any discrepancies from the storage requirements could also catch the attention of Food and Veterinary Services and have long-term effects on the business.





#### **SOLUTION**

To create one seamless autonomous solution, we chose TRB141 gateway due to its small size, convenient installation, and multiple Inputs/Outputs, allowing to connect the sensors. The gateway collects data from the temperature and door sensors and sends all information to an internal monitoring system.

In case of any temperature fluctuations outside the pre-set norms, an SMS is sent out for the system to trigger a response. A similar alert notifies when the door is left open for a particular amount of time. If any technical glitches occur, the system can be restarted remotely, which saves plenty of time for the technical staff and resolves most of the issues without human involvement.

When used together with Teltonika Networks Remote Management System (RMS), even more functionality and monitoring options are available. The system administrator may check history and audit logs of various devices deployed in multiple locations, easily customize and set-up new automation rules, and update all of the gateways remotely via FOTA.

# **BENEFITS**

- 24/7 remote autonomous management no human involvement required to resolve minor issues saves time and finances.
- Immediate response systems are triggered right away in case of any abnormalities and reacts before any serious damage is caused.
- Scalability one solution may be conveniently employed and monitored in various retail locations.
- Audit logs convenient access to reports history.

# WHY TELTONIKA?

When it comes to storing food, safety, compliance, and efficiency are top priorities. Teltonika Networks offers a possibility of autonomous remote management to avoid human mistakes, and save costs. We offer one seamless solution, which is easy to install. There are no monthly fees or mandatory subscriptions. Our product is fully and easily customizable to meet your business needs and internal system requirements.