The transportation of foodstuffs is one of the most demanding shipment services. This results from the fact that restrictive laws must be observed regarding the vehicles used for the carriage of food.

foodTraMS
Food Transport Monitoring System

The transportation of food presents tough challenges for shipping companies. Potentially variable conditions during carriage as well as possible irregularities resulting from both the functioning of the containers as well as mistakes made by the operators can result in a significant deterioration of the quality of transported goods and pose a threat to consumers' safety. Food losses due to inadequate transportation conditions can be as high as 30%, which translates into substantial financial losses. It is estimated that as much as nearly 50% of transported foodstuffs require transportation in precisely controlled conditions.

Environmental protection

Food wasted in the course of its transportation is yet another aspect to consider. In some cases, due to a lack of appropriate monitoring, part of the transported food is disposed of just to be on the safe side, to ensure consumers' safety and thus it cannot even be donated to Food Banks. The uncertainty in terms of meeting the conditions of the ATP treaty makes it necessary to dispose of food which is suitable for consumption. Such waste not only results in losses incurred by the manufacturer of the shipping company but also significantly contributes to pollution of the environment.

Solution

The FoodTraMS system has been designed for monitoring conditions during the transportation of food, particularly sensitive and perishable foodstuffs. The system consists of two primary elements: **digital recording instruments for the monitoring of temperature and transportation conditions** and **an advanced cloud-computing telemetric system.**

The RB-TL16A system logger enables the monitoring of external and internal temperatures, geographic location as well as the status of the container door (open/closed). The logger is supplied from the vehicle on-board system. The built-in battery enables 7 days of operation without the external power supply. The built-in GSM modem enables data to be fed directly into the telemetric system, and the advanced compression algorithms and optimisation ensure extremely low operating costs. The recording instruments meet all required safety standards applicable to monitoring equipment used for the transportation of foodstuffs and medicines.

Operation of the system

Data from the recording instruments is communicated to the advanced cloud-computing telemetric system. As well an Internet browser, the system requires no additional software.

The **FoodTraMS** system can work with up to tens of thousands of recording instruments but it will work equally well with smaller systems consisting of several dozen or several hundred monitored means of transport. If any significant events are detected, alarm notifications are generated and can be communicated to selected individuals via e-mail or SMS. The system features a three-stage notification chain with an escalation of alarms. The receipt of an alarm notification can be confirmed via e-mail, SMS or directly by the web application. If no confirmation is made within a set time limit, the alarm notification is sent to the next individual in the chain.

Temperature charts for any selected period are available directly in the system, no data download and no special connection with the recording instruments is required. Very quick implementation is a crucial advantage of our system. All you need to do is install the recording instruments and define their locations in the system. The system is fully operational following brief training for the operators.

FoodTraMS is a multi-language system and currently offers the following language versions: English, French, German, Spanish, Portuguese, Polish, Russian and Arabic. This ensures easy cooperation between personnel from various countries. With a smartphone or a tablet, even a mobile coordinator can access data instantly from any location in Europe.

RB- TL16A logger - technical parameters

Supply voltage:	from 5 to 47 V DC
Maximum power consumption:	2.5 W
Maximum current consumption:	400 mA
Built-in battery:	LiPo 900 mAh
Dimensions:	68x95x25 mm
Weight:	105g
IP class:	IP65
Operating temperature range:	from -30 to +60°C
Storage temperature range:	from -40 to +85°C
Humidity range:	from 0 to 95%
Temperature measurement range:	from -30 to +60°C
Measurement accuracy:	0.4°C
Measurement resolution:	0.1°C

Distributor: