OPTIMIZED POWER AND NETWORK SUPPORT FOR IN-VEHICLE DEVICES

HIGHLIGHTS

- Besides cooking appliances, a food truck is filled with network-dependent equipment that needs reliable network connectivity. Since the truck already has limited space, making sure the solution doesn't consist of pools of wires is also considered.
- The solution was accomplished by using two Teltonika Networks products: the new TSW101 automotive switch and a RUT360 cellular router. While the RUT360 gives robust network connectivity, the TSW101 switch is the one to provide it to all in-vehicle equipment, like CCTV cameras and POS terminals, while keeping them powered with PoE+.
- With the standard vehicle power supply of 12V and 24V, the TSW101 is a two-in-one switch that can transmit both Internet and power simultaneously.

THE CHALLENGE – THE MOTION, POWER, AND INTERNET DILEMMA

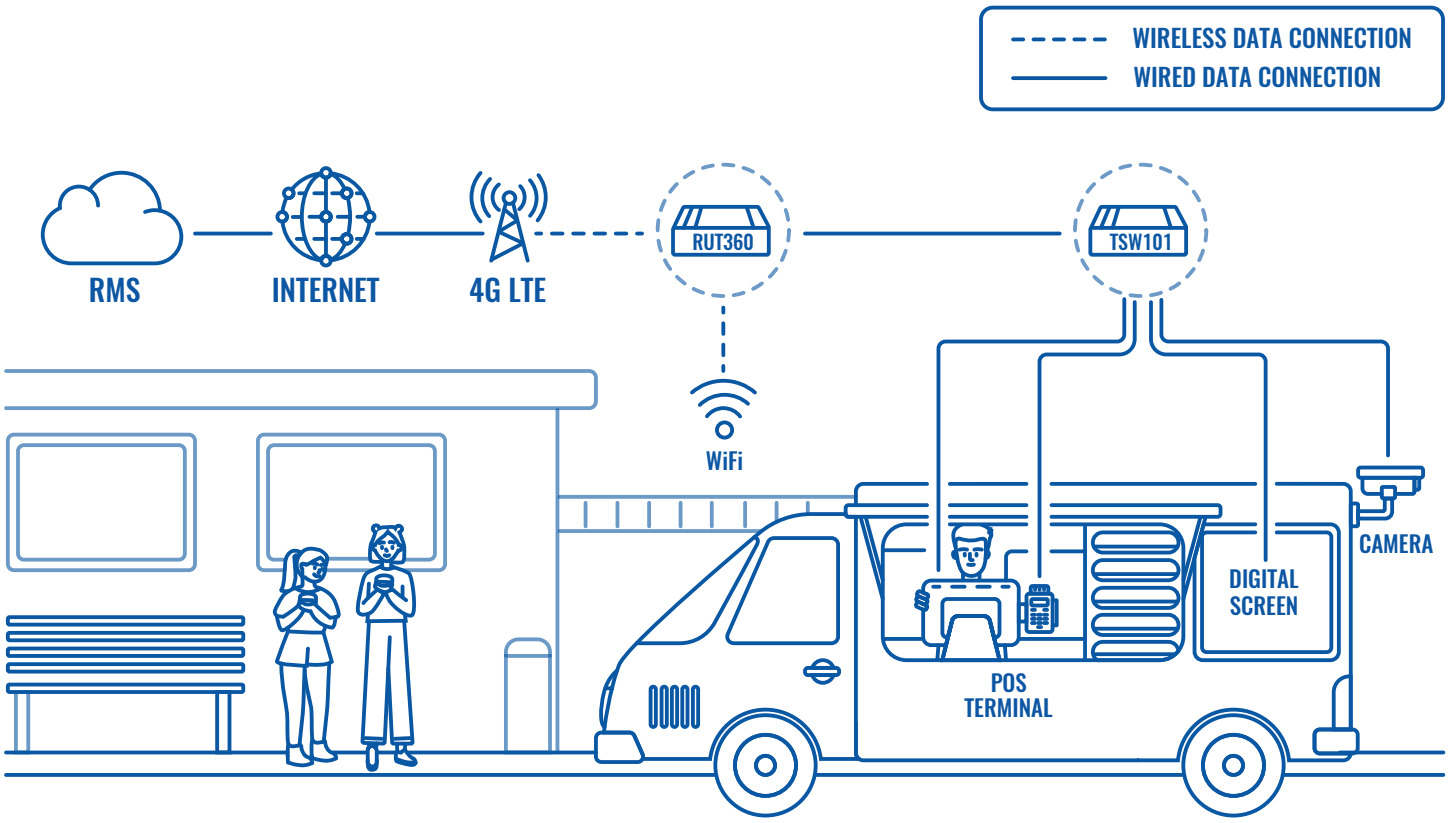
The industry of food trucks grows by 12% each year, and it's no secret why – they are an awesome way to bring locals great food and a unique eating experience right next to the side of the road. They're also great for allowing truck owners to experiment with different locations and attract new customers for further business development.

This diner-on-wheels concept doesn't require a ton of investing, making it an excellent food-related venture. However, mobility is not without some challenges, starting with the equipment.

A good cook isn't enough for the food truck to be successful. It requires equipment that ensures efficient working conditions, like a refrigerator, stoves, and ventilators, but also CCTV cameras, POS terminals, computers, and in some cases, digital menu-advertising screens. All of the latter devices from the "technical" part of the truck rely on a robust and uninterrupted Internet connection, which is hard to maintain since the food truck wouldn't be called a food truck if it weren't constantly on the go.

Your average food truck, like most vehicles, can power devices with up to 24V, but only automotive-adaptive devices that have PoE+ feature can distribute power to other appliances without having to install additional power converters. This is a significant detail, as no one wants their IoT solution to be more complicated than it already is.

TOPOLOGY



THE SOLUTION – ROAD-TESTED CONNECTIVITY

The network connectivity of a food truck is bound to be successful with a switch that's designed specifically for automotive applications!

The TSW101 has five Ethernet ports, four of which support PoE+, so it can provide other devices with a reliable Internet connection and power at the same time. With an uninterruptible power supply and a strong network connection, devices like POS terminals allow customers to pay more easily and for staff to track sales performance. At the same time, devices like digital screens can display real-time menu information.

This solution couldn't ask for a better switch than the TSW101, which was specifically designed for automotive uses. It provides in-vehicle devices with Internet connectivity and can supply power between 9 and 30VDC. This feature simplifies the setup and installation of the switch by not needing additional power converters.

The TSW101 has a durable aluminum housing and a rugged design, making it resistant to vibration and temperature changes. That's especially beneficial when roads get rocky or the kitchen gets hot.

Our ever-expanding product portfolio demonstrates our aspiration to create products that help come up with great solutions that would otherwise need additional equipment and expenses.