

Telia Smart Public Transport

Vehicle Climate Management

Smart pre-conditioning for your fleet

Automate your vehicles pre-conditioning system and take control of it. Enabling making it comfortable onboard while reducing costs and environmental impact by eliminating unnecessary heating or cooling and optimizing battery range for your electric vehicles.

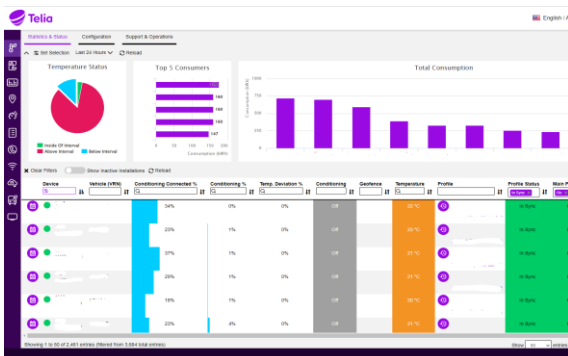
Take control of your energy consumption and costs

Instead of continuously heat or cool your vehicles to ensure a comfortable temperature onboard before first departure, you can easily eliminate unnecessary energy consumption by automating and controlling the vehicles heating system.

By automating the pre-conditioning before departure, based on when the vehicle is scheduled to run, optimizes the energy consumption, and gives you cost control. It also optimizes the battery range for your electric vehicle fleet.

Key benefits

- Automated pre-heating and pre-cooling based on set parameters and departure time
- Eliminates unnecessary heating or cooling
- Configure per vehicle or apply to groups
- Remote monitoring and configuration
- Optimizes range of battery for electrical vehicles
- Reduced costs and environmental impact
- Increased comfort for passengers and driver



Configurations in the cloud-based portal

Monitor all vehicles temperature and their status in Telia's cloud-based portal, and make sure they are within set parameters.

The portal is easy to use and lets you configure temperature profile and other parameters – to meet all needs.



Remote monitoring & configuration simplifies service management

- Temperature profiles
- Block data
- Geofence

How Vehicle Climate Management work

Vehicle Climate Management is a service that runs on the Telia Smart Public Transport platform and is connected via Telia IoT Edge; our powerful onboard edge processor and gate- way delivering real-time data to drivers and to the cloud.

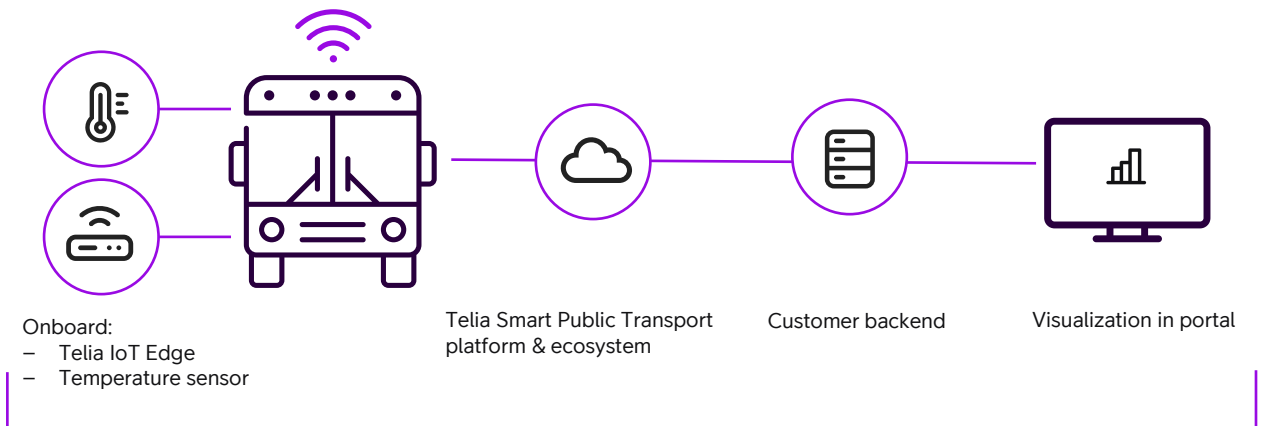
A Telia IoT Edge equipped with an antenna is installed in the vehicle. A temperature sensor is connected to the device, and together they measure and collect the vehicle's onboard temperature data.

The Telia IoT Edge sends information such as position and temperature via the mobile network to Telia's server, where the information becomes available via your cloud-based customer portal.

Managing parameters – temperature & geofence

All parameters, such as profiles for temperature and geofence, are set in the portal. Based on these parameters, the heating is managed automatically, and you can monitor its progress in real time, and see its history.

Ability to create a virtual geographic boundary on an area, so called geofence. Profiles for geofence and temperature, combined with positioning and other data, provides a vast overview on the heating status, including the vehicles status in relation to its profile, and which vehicles that consume the most energy.



End-to-end security, realibility & support

Consolidate your IT systems to one open platform

Telia IoT Edge is a powerful onboard edge processor and communication gateway. It is retrofittable and connects onboard systems and devices to the cloud. This makes it possible to download vehicle data, control, survey, update and configure IT-systems in the vehicle remotely. Telia IoT Edge combines robust, maintenance-free design with reliable and open software and application.

With an open platform, APIs and standards; you can easily integrate your own services – or add third party applications. So you can make the most of whatever the future brings.

Technical components: Vehicle Climate Management

Antenna	
Temperature sensor	
Onboard unit	Telia IoT Edge (MIIPS)
Web interface	Vehicle Climate Management portal