# 5G ROUTER FOR BUS HOTSPOT & REMOTE MANAGEMENT

## HIGHLIGHTS

- In the face of ever-increasing competition in the public transportation market, 5G is the way to provide a more efficient, accessible, and appealing travelling option to your customers.
- From high-speed Internet access via a Wi-Fi hotspot to real-time data transmission, GPS tracking, and dynamic routing – 5G offers a new level of value to passengers.
- Enabling this networking solution in the Middle East is our RUTX50, a dual SIM 5G router with auto-failover functionality for maximum reliability, cellular speeds of up to 3.3 Gbps, and single-digit latency.

## THE CHALLENGE – ATTENTION, RETENTION, COMPETITION

5G Internet is the hottest trend in the world of public transportation.

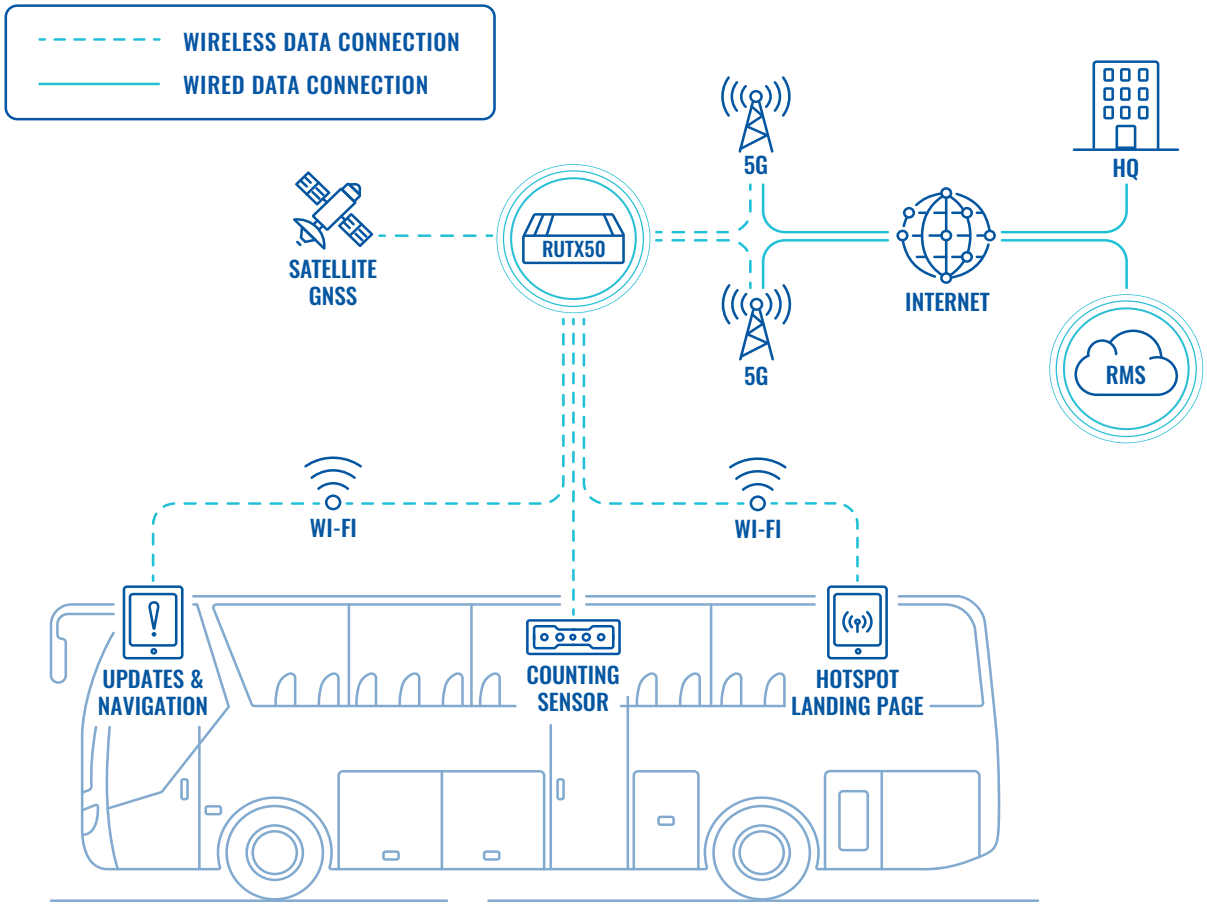
When competing for customer attention, retention, and business, ensuring the competitiveness of your service is key. Your means of transportation must be more efficient, accessible, and appealing than that of your competitors.

A 5G router has a lot to offer in this respect. For example, high-speed Internet access via a Wi-Fi hotspot allows passengers to use their travel time productively and comfortably. In addition, real-time data transmission opens up new doors of passenger value: from GPS tracking allowing them to see the exact location of buses in real-time, to dynamic routing, where buses can adjust their routes based on current traffic conditions or demand to optimise travel times.

Lastly, a 5G router supports the deployment of IoT devices, such as sensors that monitor vehicle health and passenger counts. This data can be used to improve maintenance schedules and manage passenger loads more effectively.

With this amount of value on the table, the choice of a 5G router is paramount. And when it comes to important 5G decisions, our client in the Middle East Teltonika Networks always has a reliable answer.

# TOPOLOGY




# THE SOLUTION – 5G ROUTER FOR 5G VALUE

Providing passenger buses with this immense 5G value pack is the Teltonika Networks RUTX50 5G router. This 5G SIM router is installed in an overhead cabinet near the driver seat. From there, it broadcasts a robust 5G network throughout the bus.

To access the RUTX50's hotspot, passengers are required to input their phone number to receive an SMS OTP (one-time password). This authentication enables per-passenger limitations, such as Internet access expiration (e.g., one hour per day) and upload/download bandwidth and speed. In addition, the landing page for the login can be customised to any language. In this case, the needed language was Arabic.

On the driver's end of things, a tablet uses the Wi-Fi for route navigation and receiving updates from headquarters. In addition, a report covering data usage and duration per passenger is automatically generated. This is done using a WinSCP software which extracts the database file using the Secure Copy Protocol (SCP). A DB Browser application is then used to export the .DB file as a .CVS file for further data filtering.

Thanks to this cellular router, all of this operates at cellular speeds of up to 3.3 Gbps and single-digit latency. But as any network engineer could tell you, speed is nothing if the connection isn't reliable. Luckily, the RUTX50 isn't just a 5G router with a SIM slot – it's a dual SIM 5G router.

In essence, this means the cellular router comes with auto-failover functionality, backup WAN, and other switching scenarios. If the connection of the first SIM card is interrupted for any reason, the other SIM card will pick up the mantle and ensure seamless connectivity without any hiccups.

Further bolstering this 5G router's reliability is its backward compatibility with 4G (LTE Cat 20) and 3G. Buses travel long distances, after all, and there is no guarantee 5G coverage will be available in all areas and destinations. In such cases, the RUTX50 will instead provide robust 4G connectivity. And in dire cases where event 4G isn't available – the device will provide 3G instead.

Another important aspect of this public transport networking solution is remote management capabilities. You want to maintain remote monitoring and access to your buses no matter where they are, and that means a remote management tool is vital.

To that end, our Remote Management System (RMS) is the perfect IoT platform for the job. RMS is a remote management tool providing remote access and control capabilities to your fleet of 5G routers in all of your buses, no matter where they are. By eliminating the need for your engineers to travel themselves, RMS lets you cut costs on anything from firmware updates to password changing and troubleshooting.

Don't let the competition get the edge – future proof your business with the value of 5G technology.