



# CELLULAR ROUTER FOR NETWORK EDGE REMOTE MANAGEMENT

## HIGHLIGHTS

- ✓ [Reskube](#) is a pioneering British provider of edge computing solutions, delivering resilient infrastructure that uniquely integrates always-on power and internet in a single device.
- ✓ For its edge network solution, the Reskube Edge E110, it needed a reliable cellular router capable of facilitating remote monitoring, access, and management capabilities while ensuring network redundancy.
- ✓ The chosen device is the Teltonika RUT951 4G LTE router. Together with our TSW202 managed PoE switch, this 4G router enables the Reskube Edge with maximum network reliability.

## THE CHALLENGE – UNCOMPROMISING EDGE RESILIENCE

The future of IoT lies in edge computing. This [distributed computing model](#) brings processing and data storage closer to the data's origin point – the network's edge outside the cloud. The result is enhanced performance, speed, and real-time data analysis.

In 2023, the market size of edge computing [was valued at](#) \$15.96 billion, and this number is projected to grow from \$21.41 billion in 2024 to \$216.76 billion by 2032, at a CAGR of 33.6%.

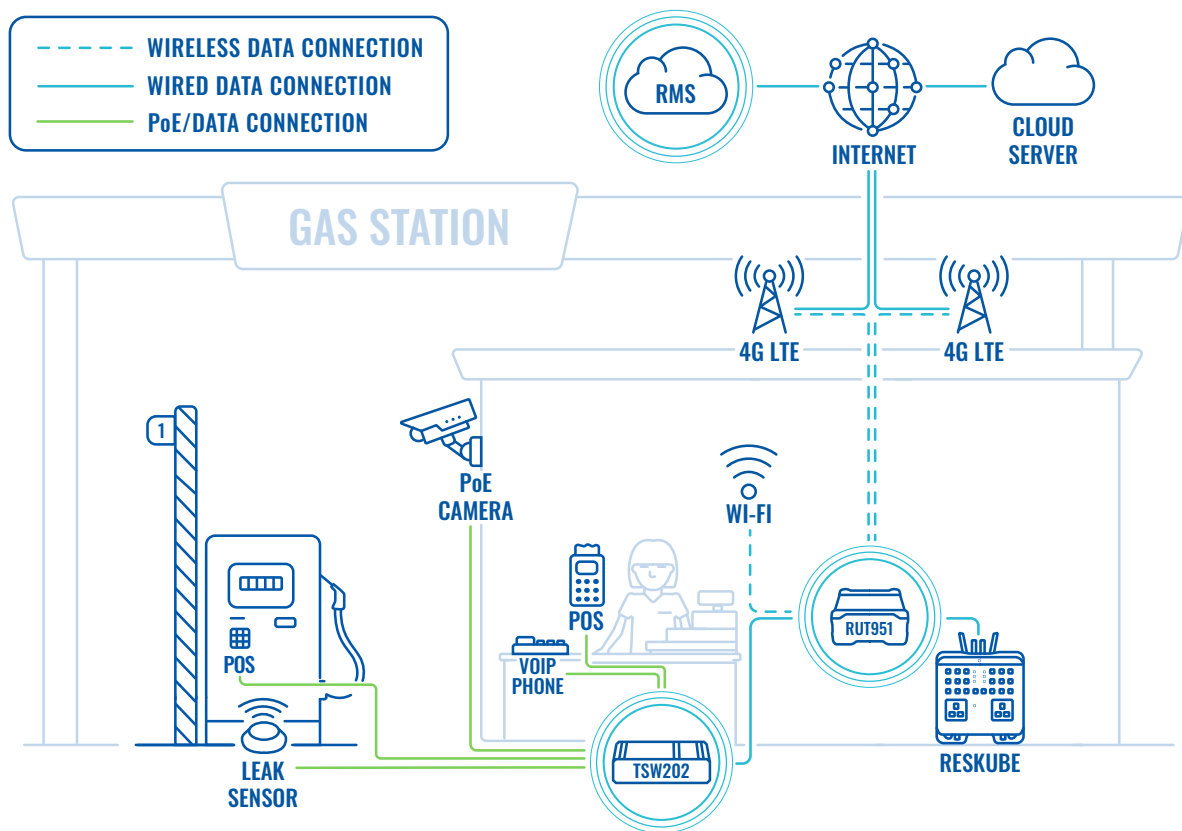
To understand the real-life context for these large numbers, let's imagine a typical remote gas station experiencing a power outage. Its personnel aren't tech-savvy, so an outside engineer must come to the station to fix the issue. The further away the gas station is from the engineer, the longer this would take. If a VOIP solution is used in the station, it would go offline during the power outage – leaving the station uncontactable.

These offline ingredients concoct a foul recipe for downtime and loss of business. While there are methods to mitigate this downtime, the best approach is to prevent it altogether.

Preventing such outcomes is our partner, Reskube. Its Reskube Edge E110 is a device that delivers the value of edge computing and converges resilient power and connectivity in a simple-to-deploy and remotely manageable device.

However, in order to create this resilient connectivity, the Reskube Edge must contain inside it an equally resilient cellular router.

# TOPOLOGY



## THE SOLUTION – CELLULAR ROUTER FOR THE EDGE

The device chosen for the role of the Reskube Edge's heart of connectivity is the Teltonika RUT951 industrial cellular router.

Connected to the RUT951 via RJ45 is the Teltonika [TSW202](#) managed PoE switch. The managed switch is configured to have [SD-WAN](#) firewall capabilities and a clustered virtual environment. VOIP phones, IP cameras, gas leak sensors, and other PoE-in end devices can be powered by the managed switch.

Now, let's imagine the same gas station power outage and see how things unfold.

Lights out.

Immediately, the Reskube Edge initiates an automatic failover to its internal battery. All devices connected to it, including the cellular router, the TSW202 managed PoE switch, and all end devices remain powered on.

Meanwhile, on the connectivity side of things, the RUT951 4G LTE router [automatically switches](#) from its primary WAN connection to a secondary SIM connection. In the worst-case scenario, it can also switch to a tertiary SIM connection to a different ISP via auto-failover. The result is a seamless, uninterrupted connection during the power outage.

Thanks to the cellular router, the entire network solution can be remotely accessed and managed from a control centre at any point. This is done via the Teltonika [Remote Management System \(RMS\)](#), easily rebranded and customised to fit Reskube's visual identity. The connection to RMS is bolstered with a suite of supported protocols, such as TLS-protected MQTT for RMS Management, and SSH, Telnet, RDP, HTTP, HTTPS, and SFTP for RMS Connect.

RMS is vital for edge computing deployments, as it centralises solution management and allows for real-time monitoring and alerts, efficient troubleshooting and maintenance, and enhanced scalability.

But it all comes down to the enabler of these remote capabilities: the RUT951. Aluminium housing and operating temperatures from -40 °C to 75 °C make this highly customisable industrial cellular router tailor-made for such industrial applications.

So, don't leave your business exposed to the whims of chance and edge cases – choose the RUT951 4G router and adopt the resilience of edge networks.

